

THE ARGUMENT FOR A FINITIST THEOLOGY

BY
RAY HARBAUGH DOTTERER

A DISSERTATION
SUBMITTED TO THE BOARD OF UNIVERSITY STUDIES OF THE
JOHNS HOPKINS UNIVERSITY IN CONFORMITY WITH THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR
OF PHILOSOPHY

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PREFACE.

It was my first intention to take Vaihinger's *Philosophie des ALS OB* as the subject of my doctoral dissertation; and in the spring of 1916 in partial fulfilment of the requirements for the Master's degree I did submit an essay on *The Philosophy of the As If in Its Application to Theology*. I became convinced, however, as the investigation proceeded, that an examination of the doctrine of a "finite God" ought to precede any attempt to appraise the value of the method of conscious illusion.

I gladly avail myself of the opportunity afforded by a preface to acknowledge my indebtedness to Professor A. O. Lovejoy for his encouragement and for his patient as well as searching and helpful criticism. As I owe much more to his lectures and to his oral and written suggestions than to his published writings, this general statement may take the place of particular acknowledgments and references in detail, which in the nature of the case could not often be given.

R. H. D.



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I.

INTRODUCTORY CONSIDERATIONS.

1. *The Method of Theological Inquiry.*—Theology may adopt any one of three methods or it may combine two or all of them with varying emphasis upon each. It may appeal to the immediate experience of the mystic, or it may simply affirm and arrange in systematic form the doctrines authoritatively taught by the Church and the Bible, or it may depend upon the "reason" and "conscience" of the individual inquirer.

The first method would of course be the best if the experience in question were not so rare. Assuming that the experience of the mystic constitutes a genuine insight into the fundamental nature of reality, he nevertheless stands in the same relation to his fellowmen as a man with normal vision to a race of men blind from their birth. It would be vain for the seeing man to discourse of the beautiful colors to be seen on every side. Indeed, it would be impossible for him to express his experience in words, since language is a social product, and the social mind of the hypothetical race would know nothing of color. Thus the mystic's direct vision of God can not be described in terms which can be understood by ordinary men, and, even from his own point of view or from that of a fellow mystic, his experience must ever remain in a measure ineffable. Moreover, the difficulty of the mystical method is aggravated by the fact that the non-mystic may not be willing to grant the objectivity of the mystic's experience. And the rarity of his experience may be made a reason for regarding it as illusory. Indeed, it may be very plausibly maintained that the alleged "revelations" of the traditional mystic are evidences of a pathological condition produced by

perception, and (b) perception of "goods" or of relative values. Viewed in this way, reason does not bring forth truth; it has the humbler office of determining which of the offspring of "intuition" may be worthy of preservation and ought to be acknowledged as true. In other words, we may be said to reason when we inquire which of our immediate perceptions of fact or of value are implied by or are incompatible with other immediate perceptions. Thus there is a sense in which both sense-perception and the perception of values are more fundamental than reasoning. But immediate perception alone is not a sufficient criterion of truth. For one of our perceptions of fact is that immediate perceptions, whether we limit our view to the experience of one mind or consider the experience of a larger or smaller group, are not all logically compatible; and that they *ought* to be logically compatible is one of our perceptions of value. If this perception of value is to be accepted as genuine, *some* immediate perceptions and *some* inferences from such perceptions must be rejected as illusory or mistaken. But when immediate perceptions are found to be mutually repugnant, that is to say, when it is impossible for all of them to be genuine in the same logical universe, the only arbiter that can decide between them is the reason. Indeed this deciding between incompatible verdicts of "intuition" is what we mean by *reason*, when we say that the method of theology must be the method of reason, rather than of mystical experience or of dependence upon authority.²

2. *The Religious Value of the Idea of God.*—We value the idea of God, and seek to convince ourselves that the idea is "real," because we feel the need of God. Our interest, however, is practical rather than theoretical. As far as the man of science is concerned there may be a God; but the scientist long ago discovered that he, *as scientist*, has "no need of that hypothesis." If, for example, a geologist should tell us that the strata of rocks occur in a given order because God laid them down in that way, or if a botanist should say that a cer-

² Cf. Russell, *Scientific Method in Philosophy*, pp. 21 f.

tain flower has five petals because God made it thus, even the least enlightened theist would admit that the assertion is from the standpoint of science irrelevant. And, in general, to "explain" the occurrence of any particular phenomenon or group of phenomena by reference to divine agency is an evasion of the problem at issue.

The value of the idea of God is, then, to be sought in the domain of practice rather than of theory. It is moral and religious rather than scientific. Traditional theology has given the Divine Being the attributes of omnipotence, omniscience, omnipresence, and moral perfection. Modern theology places moral perfection first, and rightly insists that the other attributes have religious value only when moral perfection is presupposed. First of all, God is good; and his infinite wisdom and might are subservient to his infinite love.³

Beginning, then, with the thought of the infinite goodness of God, one use of the notion of Deity at once suggests itself. God, as the absolutely good being, is man's moral goal or pattern. "Be ye perfect as your Father in heaven is perfect," becomes the maxim of the truly devout worshipper. God is the supremely perfect hero, the supreme object of imitation.

Next, combining the notion of perfect goodness with that of omniscience, we derive the idea of God as the righteous and completely informed Judge of human conduct. The more naïve worshipper thinks of a day of judgment at the end of the world; the more sophisticated, of a judgment continually going on. Whichever way the thought is taken, the believer in an all-wise and perfectly good Being has always before him the idea of an impartial and all-seeing Spectator who "searcheth the reins and the hearts." What is concealed from one's fellowmen is fully known to him. Wherein one has been misjudged by his fellows, he is judged rightly by God. At the tribunal of the Omniscient One, absolute justice is dispensed.

Furthermore God is all-powerful. He is the Sovereign of the Universe. He has created, and now upholds and governs

³ Cf. Clarke, *The Christian Doctrine of God*, pp. 70 ff.

all. Because he is omnipotent his universal purpose will eventually be completely fulfilled. The life of the believer himself and that of the group to which he belongs can not become a failure. Defeats are merely reverses, suffering is chastisement. Faith in an omnipotent God is the ground of an assured confidence in the ultimate triumph of the right and the eternal survival of the good.

Lastly, the attribute of omnipresence makes possible the thought of a divine Companion and Friend. Though foes may scorn and friends forsake, there is a heavenly Father to whom one may flee for sympathy. Though the believer is alone in the world, he is not alone, for God is with him.

Such, crudely and inadequately expressed, is the meaning of God in the experience of his worshippers. In a word, the heart of the true believer is filled with peace—with the “peace of God which passeth all understanding.”

But the peace of God is not a peace of quiescence. The truly religious man is not simply the contented man. His contentment is combined with a divine discontent with himself and his world. A “spark” has disturbed his “clod.” He, indeed, takes “no thought for the morrow,” but he labors for the morrow and for many days thereafter. He seeks “first the kingdom of God and his righteousness,” and yet is a man of affairs. He believes that the sin and the suffering and the sorrow of life have their place in the divine economy, yet he is a reformer and seeks to make the world better and happier.

3. *Some Antinomies in the Popular Notion of God.*—Such a paradoxical emotional attitude can hardly be supposed to be grounded in a logically consistent doctrine of God. Indeed the paradoxical character of the typical religious experience would suggest a self-contradictory ground. And no very profound study is required to show that the popular notion of God is shot through with contradictions. Some of these are evident to the popular mind itself; others do not appear until the notion is examined with more than ordinary care.

A few of the more obvious of these difficulties are the following.

(a) *Goodness versus Power in Relation to the Existence of Evil.*—According to traditional theology the world is partly evil, and is nevertheless the work of Infinite Power and Perfect Goodness. The antinomy is obvious: How can Omnipotent Goodness be supposed to have produced or to be the ground of an imperfect world? Attempts at reconciliation merely repeat the difficulty in a new form. Thus we hear men say that if God had not permitted some particular evil a greater evil would have occurred; that the pains and sufferings of life are means of chastisement and moral purification; that sin makes possible forms of goodness which outweigh both the sin itself and the evil consequences resulting from it. But it is obvious that this mode of explanation itself presupposes some limitation of divine power. It assumes that evil is a necessary condition of the perfection of the world, and that even Omnipotence is bound by this condition. The existence of evil is a proof of God's inability to remove it from his world, or, what amounts to the same thing, of his inability to remove or prevent it without defeating his universal purpose. Again, if we adopt the evolutionary point of view, and admit the idea of a temporal process into our reasonings about good and evil, we may say that, while God's world is not *yet* perfect, its perfection will come at the end of the evolutionary process. But the idea of evolution, the very notion of a process, is irreconcilable with omnipotence. For the idea of a *process* implies hindrance or retardation, and therefore the finitude of the energizing agent.

(b) *Righteousness versus Predestination.*—This is a special and aggravated case of the preceding difficulty. If God is omnipotent, he is the absolute Sovereign of his world, and all events are in accordance with his will; but if all events, including human actions, bad as well as good, are willed by God, then God is the real author of human sin.

(c) *The Hearing of Prayer versus Omniscience.*—If God be thought of after the analogy of an ancient oriental monarch, prayer may be regarded as necessary in order to propitiate the Despot when he is angry, or to overcome his carelessness, or his indifference to the well-being of his subjects. But, surely, in the case of a Sovereign who is perfectly good, prayer is not needed for *this* purpose. Again if God's power be limited, it may be maintained with considerable plausibility that prayer is a means of supplementing the energy which is insufficient for the accomplishment of some good purpose. But, according to the traditional doctrine, there is no defect of power, and prayer can not be justified in this way. Once more, if God's *knowledge* were limited, prayer, in the sense of petition for some definite boon, might be regarded as a means of informing God concerning human needs. The analogy of the eastern monarch here recurs, and doubtless has figured largely in the common theory of prayer. But if God is omniscient, we cannot tell him anything, and the antinomy remains unsolved.

(d) *Personality versus Immutability.*—According to traditional religious thought, God is a *person*, a Friend or Father with whom men may enjoy fellowship. On the other hand, he is also said to be "eternal," not merely in the sense that his existence is without beginning or end, but in the sense that he is supertemporal and immutable. But the attributes of personality and immutability are plainly contradictory. For a *person* is the subject of experience, and experience implies time. At any rate, human persons are in time; succession is of the very essence of their life; and therefore a divine Person who is assumed in any meaningful sense to know them and to fellowship with them must also be in time.

4. *A Prospectus of the Ensuing Discussion.*—We have seen that the attempt to think of God as omnipotent, omniscient, and immutable, and at the same time as a personal Being who is perfectly good, and who enters into communion with men and may be influenced by their petitions, is logically impossible. Accordingly, the next three sections will be devoted to

a critical exposition of two rival attempts to rationalize or to find a substitute for the traditional (Christian) conception of Deity. These contrasted theories are the theory of monistic idealism, which in its specifically theological aspect is a theory of the divine immanence, and that of pluralism, with its doctrine of a "finite" God. As my examination of these rival theories leads me to the acceptance of the latter, I have called the whole discussion "an argument for a finitist theology."

God has been said to be *infinite* in two different senses: (1) He has been said to be the Whole of reality, or at least to be the Ground and Source of all that is. (2) He has been said to be infinite in the literal numerical sense of the word; for example, to know an infinite multiplicity of knowledge-elements, or to be "eternal," either in the sense of living through an infinite sequence of moments, or in the sense of being super-temporal and yet in some manner containing infinite time. The God of monistic idealism, for example the "Absolute" as described by Josiah Royce, is held to be infinite in both of these senses. The Absolute is the all-inclusive Reality; and, by virtue of Royce's fundamental epistemological presuppositions, his one eternal or timeless Purpose includes or implies an infinite multiplicity of elements. Over against this monistic theory stand the theory of John Stuart Mill and William James, on the one hand, and that of Charles Renouvier. on the other. These theories, which I shall call respectively "ethical finitism" and "logical finitism," are mutually compatible, but, as we shall see, do not necessarily imply one another. The doctrine of a "finite" God as it is expounded by Mill and James consists essentially in the denial of God's infinitude in the former of our two senses. According to this view, God is *not omnipotent*. It is a view which is founded chiefly upon the difficulties of *theodicy*, upon the impossibility of "justifying the ways of God to man," if God is assumed to be infinite in the sense of possessing all knowledge and all power. According to Renouvier and his school, the finitude of the world and of God logically results from the self-contradiction which lurks in the conception of a "realized infinite."

The discussion of the theories of Royce and Renouvier will lead us to an examination of the so-called New Infinite of recent mathematics, as it has been defined by Richard Dedekind and Georg Cantor; for by his own account the idealism of Royce is logically dependent upon the validity of this conception, and the entire Renouvierist philosophy must go by the board if, as is maintained, the formulation of this new definition of infinity frees the notion of a realized infinite from the difficulties which Renouvier found in it. In view, therefore, of the strategic importance of this subsidiary issue, I shall devote Section VI to an examination of these contrasted ways of thinking about the infinite. My conclusion will be that the formulation of the "new" infinite has not removed the logical objections to monistic idealism, nor at all impaired the cogency of the reasonings of Renouvier and his disciples.

The last section will contain a brief summary of all that has gone before, together with a further examination of the conception of a "finite" God.

II.

THE MONISTIC ABSOLUTE AS THE PHILOSOPHIC EQUIVALENT OF GOD.

In our attempt to find a conception of God that is both rationally satisfactory and religiously serviceable we turn to the philosophers. Two types of theory may be distinguished: the monistic and the pluralistic. According to the monistic theories, God is the whole of existence; pluralistic theories, on the other hand, make God the part, but the controlling part of existence.

1. *Monistic Idealism as a Fulfilment of Traditional Theology.*—In this chapter we shall consider the monistic revision of the traditional conception of God. The theory of Josiah Royce may be taken as a typical expression of this class of theories.⁴

Royce's conception of God is regarded by its author, "not as destroying, but as fulfilling, the large collection of slowly evolving notions that have appeared in the course of history in connection with the name of God."⁵ He insists that "what the faith of our fathers has genuinely meant by God is, despite all the blindness and all the unessential accidents of religious tradition, identical with the inevitable outcome of a reflective philosophy."⁶ This conception "undertakes to be distinctly theistic, and not pantheistic. It is not the conception of an Unconscious Reality, into which finite beings are absorbed; nor of a Universal Substance, in whose law our ethical independence is lost; nor of an Ineffable Mystery, which we can only silently adore. On the contrary, every ethical predicate

⁴ For Royce's account of his philosophic ancestry, see *The Religious Aspect of Philosophy*, pp. ix ff.

⁵ Royce, *et al.*, *The Conception of God*, p. 48.

⁶ *Ibid.*, p. 50; see also *The Problem of Christianity*, Preface.

that the highest religious faith of the past has attributed to God is capable of exact interpretation in terms of our present view."⁷

Professor Royce's contribution to the theistic discussion consists, then, in the identification of God with the Absolute of idealistic philosophy; and in attempting so to define the Absolute as, on the one hand, to avoid the self-contradictions which are to be found in the notion of Deity as ordinarily conceived, and, on the other hand, to enrich the notion of the Absolute so that it shall be a fit object for the religious emotions or attitudes of awe and reverence, of faith, loyalty, and love. It is important to remember, however, that many idealistic philosophers have not been willing to regard the Absolute as personal, or in any significant sense as a Self. Thus Mr. F. H. Bradley does not apply the name God to the Absolute,⁸ and, if Dr. McTaggart is right, Hegel himself, who is commonly regarded as the father of this general way of thinking, ought not to have done so.⁹ His use of "God" and of other religious terms, says McTaggart, was merely an accommodation to the "current mythology" of the time. According to Professor Royce, however, the Absolute of monistic idealism is what the Church has really meant all along by God; but this meaning has been only vaguely apprehended, and therefore only imperfectly expressed.

As defined by Royce, God, or the Absolute, includes in his own consciousness and will the content of all finite minds. The individual self is an identical part of the Divine Self.¹⁰

"Let us sum up, in a few words," says Royce, "our whole argument. There is, for us as we are, experience. Our thought undertakes the interpretation of this experience. Every intelligent interpretation of an experience involves, however, the appeal from this experienced fragment to some

⁷ *Ibid.*, p. 49.

⁸ *Appearance and Reality*, pp. 446 ff.

⁹ *Studies in Hegelian Cosmology*, pp. 59 ff., 213.

¹⁰ *The Conception of God*, p. xiii; *Hibbert Journal*, I, 44.

more organized whole of experience in whose unity this fragment is conceived as finding its organic place."¹¹ "There must be an experience to which is present the . . . actual limitation and narrowness of all finite experience."¹²

Furthermore, since every reality exists "just in so far as there is experience of its existence,"¹³ since, in other words, everything that is, is the content of mind, it follows that the "things" which we ordinarily think of as non-mental are included in the content of the Absolute Self.

"The reality that we seek to know," says Royce, "has always to be defined as that which either is or would be present to a sort of experience which we ideally define as an organized—that is, a united and transparently reasonable experience. We have, in point of fact, no conception of reality capable of definition except this one."¹⁴ "To assert that there is any absolutely real fact indicated by our experience, is to regard this reality as presented to an absolutely organized experience, in which every fragment finds its place."¹⁵

Professor Royce's conception of the Absolute is attained, then, by combining the traditional attribute of omniscience with the idealistic presupposition that to be is to be known as being. It may be remarked in passing that if this presupposition is denied, the whole edifice of monistic idealism falls to the ground. We are not now concerned, however, with the question of the existence of the Absolute, but only with its definition. If the presupposition is granted, it is evident that, as Royce maintains, "In order to have the attribute of Omniscience, a being would necessarily be conceived as essentially world-possessing."¹⁶

The error and suffering and sin of our finite lives are all due to the fragmentariness of our experiences. When taken

¹¹ *The Conception of God*, p. 42.

¹² *Ibid.*, p. 41. Cf. *The Religious Aspect of Philosophy*, p. 441.

¹³ *The Conception of God*, p. 43.

¹⁴ *Ibid.*, p. 30.

¹⁵ *Ibid.*, p. 42.

¹⁶ *Ibid.*, p. 13.

up into the infinite completeness of the Universal Self, all the imperfections of existence cancel out, or better, all are required to constitute the perfection of the Whole. We, as fragments of the Absolute, may be victims of misfortune, unhappy, discontented, sinful. But the Absolute is perfectly good. Our imperfection, and our thought of the world as imperfect, are the consequence of the limitation of our knowledge. We know in part; the Absolute knows the Whole, and pronounces it complete, and perfectly good.¹⁷

“Misfortune comes to us, and we ask: What means this horror of my fragmentary experience?—why did this happen to me? The question involves the idea of an experience that, if present, would answer the question. Now such an experience, if it were present to us, would be an experience of a certain passing through pain to peace, . . . of a certain far more exceeding weight of glory that would give even this fragmentary horror its place in an experience of triumph and of self-possession. In brief, every time we are weak, downcast, horror-stricken, alone with our sin, the victims of evil fortune or of our own baseness, we stand, as we all know, not only in presence of agonizing fragmentary experiences, but in presence of besetting problems, which in fact constitute the very heart of our calamity. . . . Well, then, if the divorce of idea and experience characterizes every form of human consciousness of finitude, of weakness, of evil, of sin, of despair, you see that Omniscience, involving, by definition, the complete and final fulfilment of idea in experience, the unity of thought and act, the illumination of feeling by comprehension, would be an attribute implying, for the being who possessed it, much more than a universally clear but absolutely passionless insight. An Omniscient Being could answer your bitter *Why?* when you mourn, with an experience that would not simply ignore your passion. For your passion, too, is a fact. It is experienced. The experience of the Omniscient Being would include it.

¹⁷ *The Religious Aspect of Philosophy*, pp. 444 and 449; *Sources of Religious Insight*, p. 224.

Only his insight, unlike yours, would comprehend it, and so would answer whatever is rational about your present question. . . . In order to have the attribute of omniscience, a being would necessarily . . . be conceived as omnipotent, and also as in possession of just such experience as ideally ought to be; in other words, as good and perfect."¹⁸

2. *Some Difficulties of Monistic Idealism.*—As has already been remarked, Professor Royce's proof that there is such an Absolute Being as he has defined, rests upon the presupposition that all being is *being known*, that all existence is mental. Unless this assumption be granted, the argument goes to pieces. Moreover, in Chapter V we shall meet a consideration, which will make it impossible for us to conceive that the Absolute Self is real. This is the self-contradiction involved in the notion of a "realized infinite." For the present, however, I shall limit myself to pointing out certain other difficulties, which, it seems to me, are inseparable from the conception of the Absolute as it is defined by Royce.

(a) The first of these may be called the *religious* difficulty. We may approach it by considering a conception near akin to that of the monistic Absolute, namely, the conception of God as *immanent* in his world. If God is thought of as transcendent, and the supernatural and the natural regarded as mutually exclusive categories, then the friend of religion must view the progress of science with alarm. A division of the world between science and religion, between Nature and God, might be reasonably satisfactory, if one could be sure that the boundary would remain permanently fixed. But, if we define the natural as that which is explicable in terms of scientific law, then, as science extends its territory, and proclaims its belief in the possibility of a universal conquest, the outlook for religion becomes dark indeed. If the supernatural is defined as that which is *not* natural, the scientific view of the world leaves no place for God.

In this perilous situation "liberal" theologians have em-

¹⁸ *The Conception of God*, pp. 11 ff.

phasized the immanence of God, and have said that *all* events are supernatural, since all are produced by, or are particular expressions of, the immanent God. The difficulty of this procedure is, however, that, in thus preserving the right to use the *word* God, we are in danger of so impoverishing the idea of God that it becomes of little value as a religious conception. In order to meet this peril it is then necessary to insist that God is transcendent as well as immanent. Thus to avoid the danger of pantheism, Dr. William Newton Clarke, for example, maintains that "Transcendence is first. . . . It is the transcendence that gives the immanence its meaning. . . . The Christian thought of God is not so much that the immanent God is transcendent, as it is that the transcendent God is immanent."¹⁹ The God who is immanent is the Personal God.

The difficulty, however, is to see how a completely immanent God *can* be personal. Merely to *say* that God is immanent, and that therefore all events are acts of God, and that for this reason the theist need not be troubled by the claim of science to include all events in its realm; and also to *say* that God is transcendent and personal as well as immanent, does not solve the difficulty; any more than to *say* that a certain geometrical figure is round and *also* has four right angles will remove the self-contradiction from the notion of a square circle. In the same way, for Royce merely to say that the Absolute is Personal, and that his theory is a theism and not a pantheism does not suffice. Unless we assume that completeness, as opposed to fragmentariness, is *per se* worthy of reverence, an assumption which is by no means self-evident, there seems to be no sufficient reason for worshipping the Absolute;²⁰ and it seems impossible for us to enter into fellowship with such an entity, unless we consciously or unconsciously think of it *as if* it were a Person distinct from, and standing over against us and all others.

¹⁹ *The Christian Doctrine of God*, p. 322.

²⁰ See Professor Mezes's criticism of Royce's Ultimate Being, *The Conception of God*, pp. 54 ff.

(b) Furthermore, there are certain *psychological* difficulties in the conception of the Absolute. These result from the circumstance that some of our experiences, which are by definition experiences of the Absolute also, are conditioned by our very finiteness, and therefore can not be experienced by an Absolute being. Such experiences are hope and fear, for example. A being who knows perfectly what the morrow will bring forth can not hope for anything on the morrow; neither can he fear. If I am sure of obtaining a certain boon, I do not *hope* to obtain it; still less can I be said to fear lest I shall not obtain it. Both of these emotions presuppose some degree of uncertainty with reference to the future, and such uncertainty is incompatible with omniscience. In the same way it is impossible that an omniscient being should ever experience curiosity or the joy of discovery. The Absolute, too, must be without the experience of sin and repentance. Yet, as Absolute, he must contain all these experiences.

If all we mean when we say that a being is omniscient is that he *knows about* all the experiences of all other beings (in addition to all the other knowledge that he is assumed to possess), then these difficulties do not arise. The Absolute may well enough be assumed to know all about my states of mind; but he cannot without contradiction be assumed to include in the totality of his experience the identical hopes and fears and feelings of repentance that I feel.

The same remark must be made of our experience of temporal succession. God, or the Absolute, is said to know all in an *Eternal Now*.²¹ But if that is the nature of his knowledge, it is impossible that He should know things in succession. It must be admitted, however, that both kinds of knowledge are attributed to him. It is common to make a distinction between a holy place in which a real experience of succession is found, and a Holy of Holies in which all "bondage to succession" is overcome. Thus the late Professor Bowne, although

²¹ *The Religious Aspect of Philosophy*, p. 441; *The Conception of God*, pp. 59 f.; *The World and the Individual*, II, 138 ff.

he criticizes the absolute idealism of the Hegelian school on the ground that "such a system excludes all movement and progress, and the appearance of movement can only be reckoned a delusion," insists nevertheless that "from the theistic standpoint the infinite must be viewed as possessing an eternal mind so far as itself is concerned." On the other hand, "the infinite must be in time, so far as the world process is concerned."²²

Dr. William Newton Clarke writes in a similar strain: "Succession is essential to the significance of events in time, and if God had no knowledge of it he could not understand events or the history that is composed of them, or the life of his children. He has both kinds of knowledge. He eternally knows all things at once, and is also aware of them as they become realized in time and space; and in the perfect mind there is no inconsistency between these two modes."²³

But does this last clause mean anything more than that contradictions may be tolerated in the case of affirmations concerning the perfect mind, which would be intolerable if the mind were not perfect? And why this reluctance to subject the perfect mind to the "bondage of succession"? We may say, if we will, that God would be limited by succession; but is he not limited in just the same sense by the law of contradiction and the law of love? The attempt to affirm the reality of both kinds of knowledge in the Divine mind suggests, once more, the attempt to define a plane figure that is both square and circular.

This view can be logically defended in no other way than by a denial of the reality of the experience of time. Says Professor Mezes, interpreting the view of Royce, "Speaking technically, time is no reality; things *seem* past and future, and in a sense, non-existent to us, but in fact they are just as genuinely real as the present is. Is Julius Cæsar dead and turned to clay? No doubt he is. But in reality he is also alive, he

²² *Metaphysics*, pp. 486, 240 f.

²³ *The Christian Doctrine of God*, p. 346. Cf. pp. 295 ff.

is conquering Spain, Gaul, Greece, Egypt. He is leading the Roman legions into Britain, and dominating the envious Senate, just as truly as he is dead and turned to clay—just as truly as you now hear the words I am speaking. Every reality is eternally real; pastness and futurity are merely illusions.”²⁴

But if the experience of succession is illusory, what then *is* real? The fact that of two experiences one comes *after* the other is certainly as *real* as anything can be. If the two experiences are cognitive, it may indeed happen that the events to which they refer really occurred in a different order from that in which I have experienced them; or these events may really have been simultaneous; but the experiencings themselves *are* in the order in which they come, and it is meaningless to say that they are *really* in a different order, or that *they* are simultaneous. If the Absolute were merely supposed to *know about* them, he might have knowledge of them both at the same moment, although I experience them one after the other; but if my experiencings are numerically the same as certain experiencings of His, then the *order* in which they occur for me must also be the order in which they occur for Him.

(c) Last and most important of all are the *ethical* difficulties of the conception of the Absolute. If all thoughts are thoughts of God, and all events are acts of God, then our evil desires and purposes are purposes and desires of God, and all our sinful deeds are deeds of God. The antinomy between predestination and the goodness of God, which has troubled traditional and popular theology, thus appears in an aggravated form in the theology of immanence. The logical consequence is a denial of the genuineness of the distinction between good and evil, right and wrong. If the Absolute must be conceived to be “in possession of just such experience as ideally ought to be,”²⁵ then, from the standpoint of the Absolute, there is no reason for wishing that anything should be other than it

²⁴ Royce, *et al.*, *The Conception of God*, p. 60.

²⁵ *The Conception of God*, p. 13.

²⁶ *The Religious Aspect of Philosophy*, pp. 454 f.; *Sources of Religious Insight*, pp. 237, 224.

is; no reason for pronouncing one thing evil and another good.

The fact that the partisans of the monistic Absolute, like believers in the Calvinistic doctrine of predestination, have been zealous in good works, and have been strenuous advocates of reform and good haters of iniquity of all sorts, does not alter the fact that the *logical* consequence of their creed is a life of resignation and acquiescence. If the account which monistic idealism gives of the world is true, not only is it logically right for me to endure my private pains and disappointments without grumbling, and to "spiritualize" and "idealize" them, seeing that the Absolute is not unhappy, and the Absolute is not disappointed, and that in spite of these "partial evils" "in the universe as a whole the good triumphs";²⁶ but there is no reason why I should bestir myself to lighten the sorrows of my fellow men, since their sorrows too, just as they are, have their proper place in the eternal felicity of the Absolute and contribute to the perfection of the whole.

It may perhaps be said that, since nothing that we can do can disturb or impair the eternal perfection of the Absolute, we may still, without lack of logical consistency, and without defect of loyalty to the good of the Whole, attempt to brighten the little corner in which we are placed. But if the present proportion of light and shadow is just the correct one to produce the perfection of the Whole, then, assuming the Whole to remain perfect, in brightening one corner, I should automatically darken some other corner; and there is no sufficient reason for wishing to do *that*. If, on the other hand, it should be said that the precise proportion of light and shade in the universe is a matter of indifference, and that consequently I can seek my own happiness and that of others without necessarily diminishing the felicity of the Absolute or of any sentient being, then we should have to conclude that the doctrine of the Absolute is without any moral significance whatever; for, if my pains and sorrows are *not* necessary to the felicity of the Absolute, the doctrine of the Absolute provides no reason why I should bear them patiently.

The monistic idealist is sure to object at this point that the argument of the last few paragraphs is based upon an inadequate account of Royce's ethical theory. For Professor Royce speaks not only of evils which are to be *endured*, but also, and much more, of evils which are to be *overcome*; and, in his theory, the typical evil is not physical pain, or mere pain of any kind, but rather the bad will of a moral agent.

This objection of the monistic idealist, however, introduces considerations which had better be postponed until we have given an account of the ethical argument for theological finitism.

III.

THE DOCTRINE OF A FINITE GOD.

The monistic theories make a grudging admission of the individual and particular facts of life. The pluralistic theories, on the other hand, emphasize these facts and take their departure from them. For the pluralistic theories the particular and the individual constitute the true reality. The dirt and grime of actual experience must not be forgotten or ignored in the thought of an Eternal Reality which is supposed, in some mysterious or very imperfectly understood manner, to be perfect, though including imperfection. Sin and suffering are not illusions which are overcome in an Eternal Now, or fragmentary experiences which together form the perfect Whole of existence. On the contrary, the victory of the Good is not yet achieved; the world is not completed; the process of evolution is a reality. God is not all-powerful; but he is a Struggler, who is hindered and thwarted, at least for the time being, by necessities which are beyond his control. The time process is required for the accomplishment of his good purposes.

In other words, by those who hold the pluralistic view of the world, the tradition that God is Absolute, Infinite, Omnipotent, Omniscient, Immutable, etc., is definitely and consciously abandoned; and, if the belief in God is retained, he is thought of as a *finite* being, one among many, yet supreme above all.

This, in broad outline, is the doctrine of God expounded by John Stuart Mill, William James, and other philosophical radicals.²⁷ They were not afraid of unorthodox phraseology,

²⁷ For more recent expositions of the finitist doctrine, see H. G. Wells, *God the Invisible King*, and E. H. Reeman, *Do We Need A New Idea of God?*

they were not much influenced by the mere form and sound of words. Most theological and religious writers, on the other hand, and many philosophers, manifest a curious reverence for words and phrases that have been hallowed by long use and a corresponding reluctance to accept new forms of expression. They are, accordingly, disposed to shy at such a word as *finite* when it is employed as an adjective modifying the term *God*; and yet many of them are not in principle so far as they seem from the view suggested by the phrase formed of these two words. Thus many monistic idealists have held that suffering must be a genuine experience of the Absolute; and it has become a commonplace of moral and religious exhortation to say that we are co-workers with the Omnipotent. We may question the logical consistency of Absolutist philosophers and religious exhorters, and yet rejoice that, even in opposition to the logical implications of their systems, they have sought to be loyal to the facts of human experience.

In the fifth chapter we shall consider the arguments of those who have arrived at a finitist theology by a logical analysis of the notion of the realized infinite. These thinkers have come to the conclusion that it is impossible without logical inconsistency to say that anything that *is*, is infinite. Therefore neither God nor the world can be said, if we speak strictly, to be infinite. In this and the immediately following chapter, we shall restrict our attention to what may be called the *ethical* argument for the doctrine that God is finite.

This argument is essentially a *theodicy*, an attempt to justify the ways of God to men in view of the manifest evil and imperfection of the world. In brief, the argument is this: God can not be thought to be at once omnipotent and perfectly good. If we say that he is omnipotent, that his sovereignty is complete, that all events that occur are willed by him; then it follows that he is responsible for the actual world, which is partly evil, and, accordingly, that he is not perfectly good. If we begin at the other end, and say that God is perfectly good, then we must deny that he is omnipotent.

John Stuart Mill may be taken as a representative of this general tendency. His argument rests upon the evident cruelty and recklessness of Nature, from which he infers the limited power of the Author of Nature. "Next to the greatness of these cosmic forces, the quality which most forcibly strikes everyone who does not avert his eyes from it, is their perfect and absolute recklessness. They go straight to their end, without regarding what or whom they crush on the road. . . . In sober truth, nearly all the things which men are hanged or imprisoned for doing to one another, are nature's everyday performances. Killing, the most criminal act recognized by human laws, Nature does once to every being that lives. . . . Nature impales men, breaks them as if on the wheel, casts them to be devoured by wild beasts, burns them to death, crushes them with stones like the first Christian martyr, starves them with hunger, freezes them with cold, poisons them by the quick or slow venom of her exhalations, and has hundreds of other hideous deaths in reserve, such as the ingenious cruelty of a Nabis or a Domitian never surpassed. All this, Nature does with the most supercilious disregard of mercy and of justice. . . . Next to taking life is taking the means by which we live; and Nature does this, too, on the largest scale and with the most callous indifference. A single hurricane destroys the hopes of a season; a flight of locusts, or an inundation, desolates a district; a trifling chemical change in an edible root, starves a million of people. . . . Everything in short, which the worst men commit either against life or property is perpetrated on a larger scale by natural agents. . . . All which people are accustomed to deprecate as 'disorder' and its consequences, is precisely a counterpart of Nature's ways. Anarchy and the Reign of Terror are overmatched in injustice, ruin, and death, by a hurricane and a pestilence."²⁸

The main thesis of the *Essay on Nature* is that it is "irrational and immoral" to "make the spontaneous course of

²⁸ *Three Essays on Religion*, pp. 28 ff.

things the model" of man's voluntary actions.²⁹ The incidental conclusion of the essay is the position which has been stated by way of anticipation, namely, that it is absurd and irrational to hold that God is perfectly good and also all-powerful. "The only admissible moral theory of Creation," says Mill, "is that the Principle of Good *cannot* at once and altogether subdue the powers of evil, either physical or moral. . . . Those who have been strengthened in goodness by relying on the sympathizing power of a powerful and good Governor of the world, have, I am satisfied, never really believed that Governor to be, in the strict sense of the term, omnipotent. They have always saved his goodness at the expense of his power."³⁰ Recurring to the same thought in the essay on the *Utility of Religion*, Mill contends that "one only form of belief in the supernatural—one only theory respecting the origin and government of the universe—stands wholly clear both of intellectual contradiction and of moral obliquity. It is that which, resigning irrevocably the idea of an omnipotent creator, regards Nature and Life not as the expression throughout of the moral character and purpose of the Deity, but as the product of a struggle between contriving goodness and an intractable material, as was believed by Plato, or a principle of evil, as was the doctrine of the Manichæans."³¹

Mill shows that all the attempts that are made to escape this conclusion are futile, and tacitly presuppose it. "That much applauded class of authors, the writers on natural theology, . . . have exhausted the resources of sophistry to make it appear that all the suffering in the world exists to prevent greater—that misery exists, for fear lest there should be misery: a thesis which, if ever so well maintained, could only avail to explain and justify the works of limited beings, compelled to labor under conditions independent of their own will; but can have no application to a Creator assumed to be om-

²⁹ *Ibid.*, p. 64.

³⁰ *Ibid.*, pp. 39 f.

³¹ *Ibid.*, p. 116.

inpotent, who, if he bends to a supposed necessity, himself makes the necessity which he bends to. If the maker of the world *can* all that he will, he wills misery, and there is no escape from the conclusion.”

If we nevertheless attempt to escape by saying that “the goodness of God does not consist in willing the happiness of his creatures, but their virtue,” Mill replies that “if the Creator of mankind willed that they should all be virtuous, his designs are as completely baffled as if he had willed that they should all be happy.”³²

“But, it is said, all these things are for wise and good ends.” It may be said that “we do not know what wise reasons the Omniscient may have had for leaving undone things which he had the power to do. It is not perceived that this plea itself implies a limit to Omnipotence. When a thing is obviously good and obviously in accordance with what all the evidences of creation imply to have been the Creator’s design, and we say we do not know what good reason he may have had for not doing it, we mean that we do not know to what other, still better object—to what object still more completely in the line of his purposes, he may have seen fit to postpone it. But the necessity of postponing one thing to another belongs only to limited power. Omnipotence could have made the objects compatible. Omnipotence does not need to weigh one consideration against another. . . . No one purpose imposes necessary limitations on another in the case of a Being not restricted by conditions of possibility.”³³

Therefore “the notion of a providential government by an omnipotent Being for the good of his creatures must be entirely dismissed.”³⁴ If we believe that God is all-powerful and that Nature is his handiwork, our “worship must either be greatly overclouded by doubt, and occasionally quite darkened by it, or the moral sentiments must sink to the low level of the ordinances of Nature: the worshipper must learn to

³² *Ibid.*, p. 37.

³³ *Ibid.*, pp. 179 f.

³⁴ *Ibid.*, p. 243.

think blind partiality, atrocious cruelty, and reckless injustice, not blemishes in an object of worship, since all these abound to excess in the commonest phenomena of Nature. . . . He who comes out with least moral damage from this embarrassment, is probably the one who . . . confesses to himself that the purposes of Providence are mysterious, that its ways are not our ways, that its justice and goodness are not the justice and goodness which we can conceive and which it befits us to practise. When, however, this is the feeling of the believer, the worship of the Deity ceases to be the adoration of abstract moral perfection. It becomes the bowing down to a gigantic image of something not fit for us to imitate. It is the worship of power only.”³⁵

The very argument which has been chiefly relied upon to prove the existence of God, namely, the argument from design, far from establishing his omnipotence, is easily shown to be incompatible with it. “It is not too much to say that every indication of Design in the Kosmos is so much evidence against the Omnipotence of the Designer. For what is meant by Design? Contrivance: the adaptation of means to an end. But the necessity of contrivance—the need of employing means—is a consequence of the limitation of power. . . . Wisdom and contrivance are shown in overcoming difficulties, and there is no room for them in a Being for whom no difficulties exist. The evidences, therefore, of Natural Theology distinctly imply that the author of the Kosmos worked under limitations; that he was obliged to adapt himself to conditions independent of his will, and to attain his ends by such arrangements as those conditions admitted of.”³⁶

A creed like this makes human life significant. “A virtuous human being assumes in this theory the exalted character of a fellow-laborer with the Highest, a fellow-combatant in the great strife; contributing his little, which by the aggregation of many like himself becomes much, towards that pro-

³⁵ *Ibid.*, pp. 112 f.

³⁶ *Ibid.*, pp. 176 ff.

gressive ascendancy, and ultimately complete triumph of good over evil, which history points to, and which this doctrine teaches us to regard as planned by the Being to whom we owe all the benevolent contrivance we behold in Nature."³⁷

Mill's position is enthusiastically endorsed by William James in his volume on *A Pluralistic Universe*. "When John Mill said that the notion of God's omnipotence must be given up if God is to be kept as a religious object, he was surely accurately right; yet so prevalent is the lazy monism that idly haunts the region of God's name, that so simple and truthful a saying was generally treated as a paradox. God, it was said, *could* not be finite. I believe that the only God worthy of the name must be finite."³⁸ With all its ambiguities and inconsistencies, the common conception of God is at bottom that of a finite Being. The God of David or of Isaiah, the Heavenly Father of the New Testament, is not the Absolute. "*That* God," says James, "is an essentially finite being *in* the cosmos, not with the cosmos in him." "The God of our popular Christianity is but one member of a pluralistic system. He and we stand outside of each other, just as the devil, the saints, and the angels stand outside of both of us."³⁹

Mill's polemic is directed against the doctrine of omnipotence as held by traditional orthodoxy; that of James is directed against the conception of the Absolute, which has been supposed by its adherents to solve difficulties such as those raised by Mill.⁴⁰ "The absolute," insists James, "taken seriously, and not as a mere name for our right occasionally to drop the strenuous mood and take a moral holiday, introduces all those tremendous irrationalities into the universe which a frankly pluralistic theism escapes, but which have been flung as a reproach at every form of monistic theism or pantheism. It introduces a speculative 'problem of evil' namely, and

³⁷ *Ibid.*, p. 117.

³⁸ James, *A Pluralistic Universe*, p. 124.

³⁹ *Ibid.*, pp. 110 f.; see also *The Will to Believe*, pp. 116 and 134 f.

⁴⁰ *Religious Aspect of Philosophy*, p. 453; *Sources of Religious Insight*, pp. 240 ff.

leaves us wondering why the perfection of the absolute should require just such hideous forms of life as darken the day for our human imaginations. If they were forced upon it by something alien, and to 'overcome' them the absolute had still to keep hold of them, we could understand its feeling of triumph, though we, so far as we were ourselves among the elements overcome, could acquiesce but sullenly in the resultant situation, and would never just have chosen it as the most rational one conceivable. But the absolute is represented as a being without environment, upon which nothing alien can be forced. . . . Its perfection is represented as the source of things, and yet the first effect of that perfection is the tremendous imperfection of all finite experience."⁴¹

To this the partisan of the Absolute will, of course, object that the imperfection of the finite is a logically indispensable condition of the perfection of the Infinite. And not only the monistic idealist, but the defender of traditional theology may take this position. Thus St. Augustine long ago taught that evil does not disturb the order and beauty of the universe; for "as a painting with dark colors rightly distributed is beautiful, so also is the sum of things beautiful for him who has power to view them all at one glance, notwithstanding the presence of sin, although, when considered separately, their beauty is marred by the deformity of sin. God would not have created those angels and men of whom he knew beforehand that they would be wicked, if he had not also known how they would subserve the ends of goodness." "The whole world thus consists, like a beautiful song, of oppositions."⁴² Or, to employ an illustration of the Platonic-Augustinian doctrine which is repeated by Royce, "as one looking over the surface of a statue with a microscope, and finding nothing but a stony surface, might say, *how ugly!* but on seeing the whole at a glance would know its beauty; even so one seeing the world by bits fancies it evil, but would know it to be good if he saw it

⁴¹ *A Pluralistic Universe*, p. 117.

⁴² Ueberweg, *Geschichte der Philosophie*, 161 f.

as a whole. And the seeming but unreal evil of the parts may be necessary in order that the real whole should be good."⁴³

This, however, is not precisely the view of Royce himself. He is not content to say that the evil must exist to set the good off by way of contrast. He maintains that the "evil will is a conquered element *in* the good will, and as such is necessary to goodness." "Goodness . . . has as its elements the evil impulse *and* its correction. The evil will as such may be conquered in our personal experience, and then we are ourselves good; or it may be conquered, not in our thought considered as a separate thought, but in the total thought to which ours is so related, as our single evil and good thoughts are related to the whole of us. . . . As the evil impulse is to the good man, so is the evil will of the wicked man to the life of God, in which he is an element."⁴⁴

The doctrine which we have found in the earliest of Professor Royce's books is found also in those which appeared shortly before the end of his life. Thus in *The Sources of Religious Insight* he writes of evils "which cannot, yes, which in principle, and even by omnipotence, could not, be simply removed from existence without abolishing the conditions which are logically necessary to the very highest that we know. Life in the spirit simply presupposes the conditions that these ills exemplify. . . . Such sorrows, such idealized evils, which are so interwoven with good that if the precious grief were wholly removed from existence, the courage, the fidelity, the spiritual self-possession, the peace through, in, and beyond tribulation which such trials alone make possible, would also be removed, surely show us that the abstract principle: 'Evil ought to be abolished,' is false."⁴⁵

Royce holds that a world like the one we know, which contains courage, fidelity, etc., *and* the evils which make these noble human qualities possible, is ethically preferable to a

⁴³ *Religious Aspect of Philosophy*, p. 265.

⁴⁴ *Ibid.*, pp. 455 f.

⁴⁵ *Sources of Religious Insight*, pp. 250 ff. See also *The Problem of Christianity*, I, 308 and elsewhere.

world which would contain no evil and therefore none of the virtues which presuppose it. For him the ideally perfect whole is *not* composed of none but perfect parts. On the contrary the imperfection of some of the parts is a logical condition of the complete perfection of the whole. To such reasonings, James replies that "the *ideally* perfect whole is certainly that whole of which the *parts also are perfect*—if we can depend on logic for anything, we can depend on it for that definition." Is then a whole that consists of parts all of which are themselves perfect ethically preferable to a whole the perfection of which includes some imperfection, and, indeed, consists at least in part in the overcoming of imperfection? Here we have the issue between the pluralistic and the monistic ethics in a nutshell. In the next chapter we shall consider this issue in so far as it is relevant to the problem of theodicy.

IV.

THEOLOGICAL FINITISM AS THE OUTCOME OF A RATIONAL THEODICY.

If the world is conceived in a pluralistic or dualistic fashion, the case for theological finitism is complete. Mill's argument is unanswerable. If we think of God as a Person who stands in moral relations with other persons, then, even if we assume these others to be his creatures, it is impossible to hold that he is omnipotent and at the same time perfectly good. The notion of omnipotence is, in itself, logically unobjectionable: it is *logically* possible to hold that the Supreme Being is omnipotent. But, if he is omnipotent, he is either malevolent or else non-moral. The Supreme Being might be one who would take pleasure in the sufferings of his creatures, only doling out to them sufficient satisfactions to induce them to continue the business of living; or he might be wholly indifferent to their joys and sorrows. Such a being, however, would not deserve to be called God; for God, we say, is good. But if God is good, then he is not omnipotent.

1. *The Failure of Monistic Theodicy*.—In this section I propose to show that, if we think of the world *monistically*, a rational theodicy is impossible. Let us then, for the present, ignore the logical and psychological difficulties of monistic idealism, except as we shall find them to be bound up with its ethical difficulties. Let us assume the monistic theory of the world and inquire concerning its treatment of the problem of evil.

It is one of the merits of Royce's discussion that he insists upon finding a solution that shall be *rational*. He does not demand the right to make mutually contradictory statements about God, on the ground that it is about God that he is

speaking. He is not satisfied with saying that in some way that is wholly mysterious to us partial evil may be universal good. The Platonic-Augustinian analogy of the beautiful picture which is composed of dark as well as light colors⁴⁶ is not satisfactory to him. It gives us no enlightenment as to why just these particular evils are necessary to make the perfection of the whole. It suggests an ethics of quietism; for it logically implies that the distinction between good and evil is mere appearance and not genuinely valid.

For Royce, then, evil is not merely "an illusion of the partial view; . . . but . . . seems in positive crying opposition to all goodness." "We do not say that evil must exist to set the good off by way of contrast. . . . We say only that the evil will is a conquered element *in* the good will, and is as such necessary to goodness." "The good act has its existence and life in the transcending of experienced present evil." "Goodness as a moral experience is for us the overcoming of experienced evil; and in the eternal life of God the realization of goodness must have the same sort of organic relation to evil as it has in us."⁴⁷ According to the theory of monistic idealism, then, evil has its place in the perfect world. It is the condition of the possibility of the good. Even the worst conceivable evil, the deed of a traitor, may be the condition of an atoning deed by which the world is so re-created and transformed that it is "better than it would have been had all else remained the same, but had that deed of treason not been done at all."⁴⁸

Now no one will question the reality and importance of the experiences and social situations employed to illustrate the "overcoming" of evil. Physical pain sweetens and sanctifies the life of those who accept it resignedly, and bear it patiently. One who meets his troubles bravely may thus make them stepping-stones to a level of character which he could not otherwise have attained. As we study the record of human

⁴⁶ See Chapter III.

⁴⁷ *The Religious Aspects of Philosophy*, pp. 456 ff.

⁴⁸ *The Problem of Christianity*, I, 308.

progress, we frequently meet cases in which an act of sin seems to have been the indispensable condition of great good. The conception of the "overcoming" of evil is then undoubtedly a conception of great significance. Nevertheless, the theodicy offered by monistic idealism is not satisfactory. The monistic theodicy fails for two reasons: (a) It does not account for *all* evils; and (b) its account of evil tacitly presupposes a pluralistic view of the world.

(a) If the only evil were an *evil will*, and the only good a good will, then the notion of the "overcoming" of evil would be much less unsatisfactory. Let us grant for the sake of the argument, that the will may be good or evil in itself, that is to say, without reference to the consequences likely to flow from its choices (a theory which is, however, very hard to understand). But, even if we grant that *will* may be good or bad *per se*, there is no reason to hold that there are no other goods and evils. The enumeration of "goods" is a sort of personal confession of faith. No *ultimate* rational ground can be given for calling anything good or bad. The perception of values is a presupposition of all reasoning about right or wrong, good or bad. Certainly, no one will claim that the goodness or badness of *will* can be logically demonstrated. And all that I am insisting upon here is, that, if we recognize good or bad *will*, we are also justified in speaking of other "goods" and "evils."

One of these other goods is pleasure, and one of these other evils is pain. Now it is true that in many cases pain subserves a good purpose, and that the patient endurance of pain (and, still more, I should say, the effort to relieve and destroy it in oneself and in others) evokes some of the most admirable human qualities; but no one has proved that all pains are productive of sufficient good to justify their existence, and, as we shall see below, this attempted justification of pain presupposes a non-monistic view of the world.

Another "good" is life, considered apart from its pains and pleasures. The corresponding "evil" is death, especially pre-

mature death. An earthquake destroys a thousand men; a child, previously strong and healthy, falls a prey to a contagious disease, in consequence of the ignorance or carelessness of its parents and the negligence of the community. If the life of the person has ceased, he cannot be said to have been strengthened or ennobled by the misfortune that has befallen him. If, on the other hand, we assume that the person is immortal, and that his moral development continues in spite of what we call death, there is no reason for holding that his character has been improved by his unfortunate experience, or that it was in any sense good for him that his entrance into the next world should have been hastened through human ignorance and sin. In either case, there is no reason for believing that the perfection of the Absolute requires the termination of human lives in this manner.

Another "good" is sound intelligence, and the corresponding "evil," insanity. This presents an especially difficult case for the monistic idealist. The physical life continues, but all opportunity for moral achievement is cut off. The evil is surely not overcome in the individual, and there is no reason for supposing it to be overcome in the Absolute, unless, indeed, one is willing to hold that mere variety of content is to be so highly esteemed, that the content of the perfect Mind must be assumed to include the insane delusions of these unfortunates. Very similar considerations confront us when we think of those cases in which men's wills have been weakened by disease; or in which immature moral agents are compelled by economic conditions to live in an environment that is conducive to sin.

Now so long as there remains a *single* evil that cannot rationally be supposed to be "overcome," or even that cannot be rationally *shown* to be overcome, we must conclude that the monistic theodicy has failed. It is, of course, possible to find a great many cases in the life of the race, as also in the experience of the individual moral agent, where evil seems to have been thus overcome. But these cases may be matched

with others where just the contrary seems to be true. The "treason" of the sons of Jacob led eventually to the elevation of their brother to the virtual kingship of Egypt, and to the preservation of the whole Israelite clan from famine; but the assassination of Abraham Lincoln led to bitter days in the life of the American people, which, there is reason to believe, might have been shortened or prevented, if the great President had been permitted to live a few years longer. To be sure, we do not *know* what the course of events would have been, had Lincoln served out his second presidential term; but neither do we *know* what the course of events would have been, if the brethren of Joseph had never sinned, or if Judas had not betrayed his Lord.

As we look back over our lives, we see temptations overcome and difficulties bravely met and conquered; but what shall we say of the temptations that were *not* overcome, of the difficulties that were not conquered?

Professor Royce himself speaks of a class of evils that, so far as we can see, are not overcome. "Pestilence, famine, the cruelties of oppressors, the wrecks of innocent human lives by cruel fortunes—all these seem, for our ordinary estimates, facts that we can in nowise assimilate, justify, or reasonably comprehend. . . . To such evils, from our human point of view, the principle: 'They ought to be simply driven out of existence,' is naturally applicable without limitation."⁴⁹

These evils, then, are not seen to be necessary to the perfection of the universal good. They are not yet "spiritualized." But, then, with respect to all such evils, the theodicy is not *rational*. Unfortunately, philosophy must be written "from our human point of view." So far as *these* evils are concerned, we are no farther on than were Plotinus or Augustine. All we can say is that, in spite of certain ugly black spots, the picture *may* be beautiful as a whole for a Mind that can behold it thus.

(b) Our second reason for rejecting the monistic theodicy

⁴⁹ *Sources of Religious Insight*, p. 233.

is that it tacitly presupposes a pluralistic view of the world. What can we make of the claim that evil is "fragmentariness"? Is fragmentariness, as such, evil? Then nothing is really good except the Whole; and the contrast of "good" and "bad" is identified with the contrast between the "more inclusive" and the "less inclusive." But why the more inclusive should be regarded as better, and the all-inclusive as best of all, is by no means clear.

Well, then, does "overcoming" mean more than the mere relation of Whole to part? If it is to have any ethical significance, it certainly must mean more than this. Some parts of the Absolute, to wit good men and good impulses, are "good"; others are "evil"; and this difference is not a difference of size, or of complexity of organization. There is here a genuine difference of character; and therefore if the notion of "overcoming" is to have any moral significance at all, the evil that is overcome must be not merely a *part* of the Absolute, but a something *other* than the Absolute. For this reason James is right in saying that *the ideally perfect whole* is that whole of which the parts also are perfect.⁵⁰ It may not be true that the ideally perfect *world*, or the ideally perfect *group* of moral agents, is that world or group *all* the parts of which are perfect; but this is true of a *whole*; for within a whole it is logically impossible for good and evil to come into conflict. Moral "overcoming" implies a conflict of persons, or at least of numerically distinct forces, tendencies, or impulses; and not merely a contrast of parts with one another or with their Whole.

Furthermore, if monistic idealism is not to give us an ethics of acquiescence, if the notion of "overcoming" is to be taken seriously, we must assume the reality of temporal succession. All the illustrations of the overcoming of evil, the case of the traitor and all cases in which a person is strengthened and ennobled by misfortune, imply the notion of time. If it were possible to assign any meaning at all to the notion of a time-

⁵⁰ *The Pluralistic Universe*, p. 123.

less act, it might be possible to think of an eternal *prevention* of evil; but not of an eternal *overcoming* of evil.

2. *The Outline of a Finitist Theodicy.*—In so far, then, as the conception of “overcoming” is valid and morally significant, it presupposes a finitist theology. If we no longer try to think of God as all-inclusive, and no longer think of him as omnipotent, then this conception of the logical necessity and practical value of evil is a conception of great importance. But we need not affirm that *all* evils are necessary for the perfection of the world. We may admit the reality of stern and opaque necessities, which can not be transcended, which are not completely understood, it may be, by the Supreme Person himself.

The theological finitist may say without logical inconsistency that it is better that there should be sin than that no opportunity should be afforded for freedom and personality.

He may say that it is better that the operations of Nature should be uniform, than that Nature, like an over-kind nurse, should be continually stepping in to shield us from the results of ignorance, recklessness, or indolence.

He may say that some of the evils which we endure are the condition of the prevention of greater evils. He may, therefore, without inconsistency, explain much of our physical pain as a warning against courses of action that would lead to greater misery.

He may expatiate upon the educative function of suffering of every description, and show how its patient endurance, when it is irremediable, will produce a beautiful and saintly character.

In short, the theological finitist may take over into his system of thought all the particular instances of “compensation,” but need not attempt to show that the “compensation” is complete or universal. Many evils exist which ought to be “simply destroyed”; but God is not strong or wise enough, and certainly we are not, to destroy them *immediately*. In other words, the finitist may take seriously the thought of

evolution or *progress*—a conception which the absolutist is logically forbidden to entertain.

“We have found a thought,” says Royce in his first philosophical book, “that makes this concept of progress not only inapplicable to the world of the infinite life, but wholly superfluous.” “Progress in this world as a whole is therefore simply not needed.”⁵¹ For the theological finitist, on the contrary, the concept of progress, far from being “superfluous,” is of immense significance. He hopes for, and believes in the possibility of, a better world; and, while lamenting the logical inconsistency of his monistic brother, works by the side of the latter in the effort to hasten the coming of this better world.

⁵¹ *The Religious Aspect of Philosophy*, pp. 464, 466.

V.

LOGICAL FINITISM AND THE IDEA OF GOD.

In the preceding chapters we have come to the conclusion that it is impossible to think of God as infinite in the first of the two senses of the word. (See Chapter I, Section 4.) The hard facts of human experience forbid us to say that God is the Whole of reality, or that he is omnipotent. In the present chapter I wish to discuss the arguments of a school of thinkers who have maintained the logical absurdity of holding that God is infinite in the *second* of our two senses. According to these thinkers we cannot say without self-contradiction that God (or the world, or anything) consists of or includes an infinite multiplicity of elements, or perdures through an infinite sequence of moments. While this theory and the view which I have called "ethical finitism" do not imply each other, inasmuch as they deny the infinity of God in two different senses, yet these two kinds of finitism are mutually compatible, and support one another, since both are opposed to monistic idealism, which maintains that God, or the Absolute, is infinite in both senses.

The founder of this school of thinkers was Charles Renouvier (1815–1903), who is said by James to have been the "strongest philosopher of France in the second half of the nineteenth century."⁵² As important disciples we may name F. Pillon, F. Evellin, and E. Boutreux. Henri Bergson, France's most eminent living philosopher, has been greatly influenced by Renouvier, but it would scarcely be just to call him a disciple.⁵³

"Neocriticism," as the Renouvierist philosophy is called in

⁵² *Problems of Philosophy*, p. 163. This, the last book of William James, is dedicated "to the great Renouvier's memory."

⁵³ Thilly, *History of Philosophy*, pp. 511 f.

recognition of its historic relation to the system of Kant, is characterized by Windelband as a synthesis of Kant and Comte. Renouvier, however, while no doubt influenced by Comte, always emphasized the difference between his own philosophy and positivism. Positivism begins with a discussion of the natural sciences and of the implications of scientific method, and is led to a rejection of the notions of being-in-itself and transitive cause. Neocriticism reaches a similar conclusion by a different road. It "begins with the logical investigation of mental phenomena, . . . and completes the Humian critique of the concepts of substance and causality by means of an apriorism related to that of Kant: in mental phenomena we have to seek 'essentially' the laws of all being. Thus neocriticism is indeed phenomenalism, but not empiricism."⁵⁴

1. *The Finitist View of the World.*—The best introduction to the philosophy of Renouvier is a study of the Kantian "antinomies." According to the first of these it can be proved that the world has a beginning in time and limits in space; and it can be proved with equal cogency that it has no beginning and no limits. The second antinomy affirms that every compound substance consists of simple, that is indivisible, parts; and also that there is nothing simple, but that everything is infinitely divisible. The third and fourth antinomies treat in the same way the issue of causality *versus* freedom, and the question of the existence of an absolutely necessary Being.⁵⁵

There are certain obvious weaknesses or oversights in the demonstration. Yet it is possible so to revise Kant's arguments as to make them much more cogent.⁵⁶ If, then, the demonstration of both thesis and antithesis, in the case of each or only of some of these examples of the conflict of reason with

⁵⁴ Windelband, *Lehrbuch der Geschichte der Philosophie*, S. 515; Feigl, *Der Französische Neokriticismus*, S. 9.

⁵⁵ Kant, *Kritik der Reinen Vernunft*, A, 426-461 (Mueller, pp. 344 ff.).

⁵⁶ See Renouvier, *Critique de la Doctrine de Kant*, pp. 29 f. Cf. *Les Dilemmes de la Métaphysique Pure*.

itself, be regarded as valid, the natural outcome might seem to be a thoroughgoing scepticism, an utter despair of the possibility of attaining the right to be certain about anything. For if the human reason thus falls into necessary self-contradiction, what ground have we for trusting it even in those cases in which no contradiction is discoverable? Such a complete scepticism, however, is *practically* impossible; and, accordingly, it is more common for those who hold that both the theses and the antitheses are valid to argue that the existence of these antinomies constitutes a reason for the subordination of the human reason to the authority of the Church or the Bible. From these necessary conflicts they conclude that human reason has its limits, that we are not always safe in refusing to believe some propositions, even though they appear to us to be logically absurd or self-contradictory. Difficulties and even self-contradictions may be found in the historic creeds, if we look for them; but the same is true of some of the most commonly received conceptions, such as the notions of space and time. Therefore, these thinkers argue, we are justified in believing "mysteries," that is to say, in holding to the truth of propositions that are logically inconceivable.⁵⁷

In one of his earliest philosophical works, *Le Manuel de Philosophie moderne* (1842), Charles Renouvier himself had thought it possible to believe both the theses and the antitheses of these antinomies.⁵⁸ But the *Essais de Critique générale* began a polemic against this position;⁵⁹ and, in his mature philosophy, logical conceivability, that is to say, freedom from self-contradiction, became the criterion, not only of all valid thinking, but also of real existence. Thus it is a cardinal principle of the neo-criticist school that one of the two sides of each of the mathematical antinomies must be false. There is no meaning in saying that *both* are true. As Evellin puts it, "To say *yes* and *no* of the same thing at the same time

⁵⁷ See Mansel, *The Limits of Religious Thought*; Newman, *The Grammar of Assent*; Hamilton, *Lectures on Metaphysics*.

⁵⁸ Arnal, *Philosophie Religieuse de Charles Renouvier*, p. 29.

⁵⁹ *Ibid.*, p. 33.

and under the same point of view, this is contradiction; and for the understanding contradiction is death.”⁶⁰

Accordingly the neo-criticists recognize the principle of contradiction as the fundamental principle of thought. Moreover, they refuse to exempt any topic of discussion whatever from the sway of this principle. You can't appeal to it in order to demolish the theories of other people, and then refuse to admit its universal validity when it threatens to demolish some pet theory of your own. This principle, they insist, is essential, not only to human intelligence, but to intelligence as such. You may speak if you will of an intelligence that is higher than human; but, unless the principle of contradiction is a principle of this higher intelligence also, the phrase “higher intelligence” is a phrase without meaning. Or, if you say that you believe in “truths above reason,” which on the plane of human reason take the form of self-contradictory propositions, they will tell you that you are the dupe of words. Each of the words of a self-contradictory proposition may indeed have a perfectly clear and definite meaning when taken separately, but the combination has no meaning, and the so-called proposition is, strictly speaking, no proposition at all, but merely a succession of words. You may believe that you believe it; but in reality you do not believe it, for it is neither true nor false but meaningless.

The principle of contradiction is thus the corner-stone of the Renouvierist philosophy. Next in importance, and, as Renouvier and his disciples maintain, a necessary consequence of it, is the “principle of number.” This is the principle that an *infinite number* is a self-contradictory notion, and that there can therefore be no *actual infinite*. Again and again in his voluminous writings⁶¹ Renouvier recurs to this point, and seeks to establish it in various ways, but especially by an examination of the properties of the series of cardinal numbers.

⁶⁰ Evellin, *Infini et Quantité*, p. 19. Cf. Renouvier, *Les Dilemmes de la Métaphysique Pure*, pp. 2 f.

⁶¹ See *Les Dilemmes de la Métaphysique Pure*, pp. 122-125; *Nouvelle Monadologie*, p. 35; *Logique Générale*, I, pp. 46 f., 57, and elsewhere.

A typical illustration of the absurdity of supposing that an infinite unnumber may actually be given is borrowed from the writings of Galileo. It runs as follows:

"Suppose the series of natural numbers to be given. We can then form another sequence composed exclusively of the squares of the first, for it is always possible to find the square of a number. Thus, by hypothesis, the second sequence will have a number of terms equal to the number of terms of the first. Now the first contains all the numbers, squares as well as not-squares, while the second contains only the squares. The first has, therefore, a number of terms greater than that of the second, since, containing all the numbers, it contains all the squares, and it contains besides the numbers that are not squares. But by hypothesis or construction, these numbers of terms are equal. Therefore there are some equal numbers of which one is greater than another. But this consequence is absurd. Therefore it is absurd to suppose the natural series of numbers to be actually given."⁶² Now if the natural series of numbers were given, it would of course be an actually infinite multitude. But we have seen that it is absurd to suppose that the entire series of cardinal numbers is given; and, if this is true of the series of numbers, it is obviously true of *every* infinite series, since the terms of any series may be numbered "one," "two," "three," etc. Therefore the notion of an *actual infinite* is absurd. In other words, every multitude has a number; but the notion of an infinite number is logically impossible; and therefore it is impossible that there should be any actually existing infinite multitude.

Here, however, an important distinction is to be made. We should discriminate between the notion of an infinite which is merely potential and that of an infinite in the absolute sense of the term. "The first consists in this: that, however great or small we assume a given entity to be, and however much we imagine it to be increased by repeated multiplications, there

⁶² Renouvier, *Les Principes de la Nature*, p. 37; also *Année Philosophique*, 1890, pp. 83 ff.

must still be thought to be something greater or smaller. The second infinite consists in this: that a thing has actually and absolutely so much magnitude or smallness that one can not imagine more of it."⁶³ The first infinite is called by Renouvier and his disciples the *indefinite*. Now the indefinite is a clear idea; but of the absolute infinite it is psychologically and logically impossible to form any conception. It is evident from the above definition of the indefinite that it never *is*, but always *becomes*. Accordingly the indefinite may also be called the *potential* infinite.

2. *The God-Conception of the Logical Finitist*.—Some of the theological implications of logical finitism are discussed by Pillon in the *Année Philosophique* for 1890, in an article entitled "La Première Preuve Cartésienne De L'Existence De Dieu et La Critique De L'Infini." In this article, from which several citations have already been made, Pillon reminds us that Descartes, after removing the doubt of his own existence by the help of the *cogito ergo sum*, seeks to escape from egoistic idealism by means of the idea of infinity or perfection. The truth of our ideas about an external world is inferred from the existence of God; and the existence of God is inferred from our possession of the *idea* of God.

"Among my ideas there is one which represents a God, sovereign, eternal, infinite, immutable, omniscient, and universal creator of the things which are outside of him." This idea, says Descartes, must have a cause; and Descartes assumes that there must be at least as much "reality" in the efficient cause as in its effect. No idea can contain more objective reality than the formal reality of its cause. Now, the only cause adequate to the production of this idea of God, which we find in our minds, is God. Therefore God exists. Therefore the external world is a real world. Such is Descartes's reasoning.

Pillon remarks that, in assuming the general proposition that the effect can not be superior to the efficient cause, Des-

⁶³ *L'Année Philosophique*, 1890, p. 56.

cartes reveals a failure to make his original doubt as universal as he supposed he had made it.⁶⁴ If, with the school of Renouvier, we hold that there may be first beginnings, that is to say, uncaused events, it is evident that there is no necessity for believing that the effect can contain no more "reality" than the cause. For, in so far as the scholastic principle is regarded as demonstrable, it rests upon the assumption that every event must have a cause. The scholastic philosophers reasoned, and after them Descartes, that if the effect contained more reality than the cause, then, assuming that both effect and cause are divisible into parts, some parts of the effect would be uncaused, since the more real being would have the greater number of parts. If, however, we assume that there is no necessary connection between the notion of a beginning and that of an effect, the scholastic principle assumed by Descartes sinks to the level of a pseudo-axiom. Accordingly, even if we *do* possess the idea of an infinite and perfect being, we are not justified in arguing from the fact of its possession to the existence of such a being.

Moreover, says Pillon, Descartes confused the notions of infinity and perfection. Descartes assumes the synonymity of the words "infinite" and "perfect." But, "the idea of the perfect, which Descartes and after him Malebranche, Fenelon, Leibniz, all the spiritualist philosophers of the eighteenth century, as all those of our time, have always confounded with that of infinity, should be rigorously distinguished from it. This distinction is one of the fundamental theses of the phenomenalist criticism."

"Perfection is a general idea, formed from the ideas of diverse qualities of an excellence such as we contemplate with unmixed satisfaction, and to which we judge nothing that we can imagine of the same order to be preferable. These qualities are intellectual or moral or even physical: Such are knowledge, wisdom, justice, goodness, happiness, beauty, etc. A perfect being is a being in which these qualities are united,"

⁶⁴ *L'Année Philosophique*, 1890, p. 161.

and so fittingly and harmoniously combined that there is no occasion for "reproach or desire." "The ideas relative to perfection and those which concern mathematical magnitude form, in reality, two separate and irreducible categories." These categories rest upon two kinds of comparison: Comparison of quantity and comparison of estimation or preference.⁶⁵ The notion of perfection is then one which we can make for ourselves. Consequently, we do not need to assume the existence of a perfect being in order to explain the presence of the idea in our minds.

The notion of infinity, *i. e.*, of infinity in the absolute sense, we can not make. But, says the neo-criticist, we do not really possess this notion, because it is logically contradictory. The causal relation of our notions of infinity is just the opposite of that supposed by Descartes. "It is not the idea of the real and absolute infinite impressed in our soul by this infinite, which explains the formation of our ideas of potential infinities. It is our ideas of potential infinities drawn from ourselves, which have conducted us by a process logically illegitimate, but psychologically natural, to the idea of the real and absolute infinite. It is the infinities, apparently actual, of the spatial and temporal world that have led us to the divine attributes."⁶⁶

We can not, therefore, have any valid conception of infinity in the absolute sense. The world is finite and God is finite.

3. *The Attributes of the Finite God.*—The idea of God which was supposed by Descartes to have been impressed by the Creator upon every human mind represented God as "sovereign, eternal, infinite, immutable, omniscient, omnipotent." The neo-criticist "principle of number," as we have seen, compels a revision of this idea.

By Pillon, as by Royce,⁶⁷ *omnipotence* is treated as the typical attribute of Deity. We may justify this method of procedure on the ground that, in the first place, omnipotence

⁶⁵ *Ibid.*, pp. 51, 111 ff.

⁶⁶ *Ibid.*, p. 110.

⁶⁷ See Chapter II.

implies omniscience; knowing is only a particular kind of doing. Not to know and not to be able to find out would be not to be able to do. In the second place, and conversely, omniscience implies omnipotence. That knowledge is power is attested by the etymological affinity of the German *können* and *kennen*, and the English *can* and *cunning*, and by the uses of the French verb *savoir*. To know how is the same thing as to be able. An omniscient being, accordingly, will know how to do all things, that is to say, will be able to do all things, will be omnipotent; and, on the other hand, if logic forbids us to think of God as omniscient, then we can not logically think of him as omnipotent either.

Pillon approaches the discussion of the divine omniscience from the side of perfect foreknowledge. The problem is to reconcile the idea of perfect foreknowledge with the neo-criticist principle of number, and this reconciliation is, of course, impossible.

Objection has frequently been made to the idea of a foreknowledge of "free" acts. But the objection which Pillon is urging holds against the foreknowledge of determined events as well. For "these necessary or determined future events do not form a whole, a determined number, since they are supposed to produce themselves in a time which has no limits. It is an endless series, not simply of possibles, but of necessities. It is necessary to say that the potential infinity of these future events finds itself in some manner realized in the divine understanding; or else it is necessary to reject the perfect and absolute foreknowledge even when it is a question of necessary future events."⁶⁸

Yet we may distinguish two sorts of omniscience, or in the special case just now in question, of perfect foreknowledge, corresponding to the distinction previously made between the absolute, or actual infinite and the potential infinite. There is, accordingly, a sense in which it is *logically* unobjectionable to speak of perfect foreknowledge. "Does it follow then,"

⁶⁸ *Ibid.*, p. 174.

concludes Pillon, "that one ought to regard as impossible the perfection of foreknowledge? Yes, assuredly, if one makes this perfection consist in the knowledge of an infinite number of future realities. No, if in place of attributing to the being who is supposed to be perfect a "single infinite and eternal thought," one admits that his intelligence differs from ours by its extent, and not in respect of its nature; that it proceeds like ours by separate and successive acts of thought; that it is free to push back successively the limits of its horizon, but that it is always obliged to have a horizon. Thus understood omniscience presents no contradiction."⁶⁹ In other words God might, so far as the purely logical argument is concerned, be assumed to be omniscient, in the sense of knowing all that is at any given moment knowable, even if he is finite in the sense of the neo-criticist.

Accordingly, the view of Mill and James and of the previous chapter is not logically bound up with that of Renouvier and Pillon. Logical finitism suggests and makes room for, but does not in itself require ethical finitism. As has already been said, our reasons for denying the divine omnipotence and omniscience are not merely logical; they are chiefly ethical. Yet the neo-criticist argument prepares men's minds for the acceptance of this ethically grounded argument. Both arguments presuppose loyalty to the principle of contradiction, and both presuppose a certain freedom from the traditional preference for such *words* as "infinite," "omniscient," "omnipotent," etc., when employed as adjectives modifying the word "God."

⁶⁹ *Ibid.*, p. 179.

VI.

THEOLOGY AND THE "NEW INFINITE."

When Renouvier wrote his principal works he could say that the mathematicians were all agreed in rejecting the notion of an infinite number. As Arnal remarks,⁷⁰ "All the mathematicians who had weighed the terms of the alternative . . . were unanimous. All from Galileo to Cauchy had emphasized the impossibility of the infinite of quantity, the absurdity of the realized infinite. . . . Why should that which is impossible and absurd from the point of view of mathematics be maintained from the point of view of metaphysics?"

Since the middle of the last century, however, the mathematicians have been more favorably disposed towards the quantitative infinite, and the neo-criticists' appeal to the consensus of all mathematicians "from Galileo to Cauchy" is met by the counter-appeal to a rival consensus of philosophical mathematicians and mathematically-minded philosophers from Bolzano to Bertrand Russell. In the judgment of several contemporary thinkers one of the great achievements of the latter half of the nineteenth century was the discovery of a new definition of infinity, which, it is maintained, frees the conception from all the difficulties and puzzles found in it as formerly defined.

1. *The New Definition of Infinity.*—The "new" definition of infinity is an incident, perhaps the culminating incident, in the "generalization" of the concept of number.⁷¹ If we had only the *finite* whole numbers, 1, 2, 3, etc., while the fundamental operations of addition, multiplication, and involution would be in every case possible, the inverse operations would not be universally possible. For example, it would be impossible, if we had only such numbers, to subtract 3 from

⁷⁰ *La Philosophie religieuse de Charles Renouvier*, p. 36.

⁷¹ Couturat, *De L'Infini Mathématique*, pp. 5-68, 281.

2, to divide 2 by 3, or to find the square root of 3. In order that subtraction, division, and evolution may be universally possible, mathematicians have introduced the conception of *negative* numbers and *zero*, of *fractional* numbers, and of *irrational* and *imaginary* numbers. The definition of *infinite* or "transfinite" numbers should therefore be considered, not as an isolated incident, but as a part of this larger movement of mathematical thought.

One of the discoverers of transfinite number was Georg Cantor. His theory of number is found in two memoirs which appeared in the *Mathematische Annalen* for 1895 and 1897 under the title "*Beiträge zur Begründung der Transfiniten Mengenlehre*." These memoirs have been translated into English by Philip E. Jourdain under the title of "*The Theory of Transfinite Numbers*."⁷² Cantor here defines the "power" or "cardinal number" of an aggregate M as "the general concept which, by means of our active faculty of thought, arises from M when we make abstraction of the nature of its various elements m and of the order in which they are given." If we do *not* make abstraction of the *order*, but only of the nature of the elements, the resulting concept is the *ordinal* number of the aggregate M . Two aggregates are *equivalent*, and therefore have the same cardinal number, "if it is possible to put them, by some law, in such a relation to one another that to every element of each one of them there corresponds one and only one element of the other."⁷³ Employing the notions of an *aggregate* and of *equivalence*, together with the notions of "bindings" and "coverings," Cantor then defines the concepts of "greater" and "less," and the operations of addition, multiplication, and involution.⁷⁴

⁷² The Open Court Publishing Company, 1915.

⁷³ *The Theory of Transfinite Numbers*, p. 86.

⁷⁴ *Ibid.*, pp. 89-95. One aggregate is said to be greater than another (and therefore the cardinal number of the first greater than the cardinal number of the second) when (a) there is a part of the first which is equivalent to (i. e., can be put in one-to-one correspondence with) the second, but (b) no part of the second which is equivalent to the first (pp. 89 ff.).

This brings him to the discussion of the finite and transfinite numbers. "Aggregates with finite cardinal numbers," he says, "are called 'finite aggregates'; and all others we call 'transfinite aggregates,' and their cardinal numbers 'transfinite cardinal numbers.'"⁷⁵ The transfinite numbers are thus those that are *not finite*. We must therefore seek the distinguishing mark of the finite number. This is to be found in the following theorem: "If M is an aggregate such that it is of equal power with none of its parts, then the aggregate (M, e) , which arises from M by the addition of a single new element e , has the same property of being of equal power with none of its parts." This theorem is used in establishing the fundamental properties of the "unlimited series of finite cardinal numbers,"⁷⁶ and becomes a virtual part of their definition. Finite aggregates, accordingly, are never equivalent to any of their parts, while transfinite aggregates may be. "The first example of a transfinite aggregate," continues Cantor, "is given by the totality of finite cardinal numbers; we call its cardinal number 'Aleph-zero.'" The first transfinite cardinal number is, then, the cardinal number of the "totality" of finite cardinal numbers.⁷⁷

It should be noted that Cantor calmly assumes the logical tenability of this notion of the "totality" of an *unlimited* series, and as we shall presently see this is the crux of the whole matter. Just now, however, it is our purpose to understand the doctrine rather than to criticize it.

A further advance in the theory of number ought next to be noted. Cantor, as we have seen, defined "cardinal number" and "ordinal type" as "general concepts which arise by means of our mental activity." Frege, in his *Grundlagen der Arithmetik* of 1884, defined "the number of a class u " as "the class of all these classes which are equivalent to u ." The same definition was discovered independently by Bertrand Russell. "The two chief reasons in favor of this definition," says Jour-

⁷⁵ *Ibid.*, p. 103.

⁷⁶ *Ibid.*, pp. 97-103.

⁷⁷ *Ibid.*, p. 103.

tain, "are that it avoids, by a construction of 'numbers' out of the fundamental entities of logic, the assumption that there are certain new and undefined entities called 'numbers'; and that it allows us to deduce at once that the class defined is not empty, so that the cardinal number u exists in the sense defined in logic; in fact, since u is equivalent to itself, the cardinal number of u has u at least as a member."⁷⁸ Cantor's definition of an infinite or transfinite number accordingly becomes "the class of all classes that are similar to parts of themselves."⁷⁹

The "New Infinite" was independently discovered by Richard Dedekind.⁸⁰ His definition runs as follows:⁸¹ "A system S is said to be *infinite* when it is similar to a proper part of itself; in the contrary case, S is said to be a *finite* system."

The words "system," "similar," and "proper part" are employed in a technical sense, and require some explanation. A collection of objects is called a *system* (also by different writers an *aggregate*, *manifold*, or *set*) when it fulfils the following conditions:⁸²

(1) It includes all the objects to which a definite quality belongs.

(2) It includes no object which does *not* possess this quality.

(3) Each of the included objects is permanently the same, and distinct from all the others. These separate objects are called *elements*. In Dedekind's terminology, every system is a *part of itself*; while a system which contains some, but not all, of the elements of a given system is a *proper* part of the given system. The notion of *similarity* is identical with Cantor's "equivalence," and exactly the same meaning is con-

⁷⁸ *Ibid.*, pp. 202 f.

⁷⁹ Russell, *Principles of Mathematics*, pp. 262, 321.

⁸⁰ *Essays on the Theory of Numbers*, p. 41. This is a translation by W. W. Beman of Dedekind's papers on "*Stetigkeit und irrationale Zahlen*" and "*Was sind und was sollen die Zahlen*."

⁸¹ *Ibid.*, p. 63.

⁸² Cf. *Encyclopedia Britannica*, 1910, Article on *Number*.

veyed by the phrase "one-to-one correspondence." Any two groups or series are said to stand to each other in the relation of one-to-one correspondence when for each element or term of the one there is one and only one element or term of the other, and *vice versa*. To borrow an illustration from Mr. Russell,⁸³ "The relation of father to son is called a one-many relation, because a man can have only one father but may have many sons; conversely, the relation of son to father is called a many-one relation. But the relation of husband to wife (in Christian countries) is called one-one, because a man cannot have more than one wife, or a woman more than one husband."

Dedekind's point is *not* that two systems which are assumed or already known to be infinite are similar or one-to-one correspondent, *even if* the one is only a part of the other. That such a similarity or equivalence is to be found between whole and part was, as we have seen, the very puzzle that had perplexed the older mathematicians. The achievement of Dedekind (if it is a genuine achievement) is rather the reversal of the method of attack. The "similarity" of whole and part is no longer merely an observed fact, nor is it for him an *inference* from their infinity; but infinity is now *defined to be* such similarity. *If* a system or aggregate is similar to a proper part of itself, then it is infinite; and this is the *definition* of an infinite system.

2. *The New Infinite and Logical Finitism.*—It has been maintained by M. Couturat and others that Renouvier's critique of infinite number, and therefore his whole system of philosophy so far as it is based upon this critique, is founded upon an erroneous definition of the mathematical infinite.⁸⁴ It accordingly becomes a matter of some importance to inquire into the merits of this "new" and, as is maintained, more correct definition. Our examination will lead us to the conclusion that the "new" infinite is only the old infinite in a rather easily penetrable disguise; that the definition of Dede-

⁸³ *Scientific Method in Philosophy*, p. 203.

⁸⁴ *De L'Infini Mathématique*, pp. 444 ff.

kind and Cantor is the logical equivalent of the definition suggested by etymology; that, therefore, if the reasoning of the neo-criticists is sound as long as we use the *old* definition, their arguments lose none of their cogency when we substitute the definition formulated by the new school of mathematicians.

If we had no other preceptor than etymology, we should at once conclude that the infinite is that which is limitless or incapable of completion. The definition of infinity adopted by Kant in his account of the "First Conflict of the Transcendental Ideas" appears to be no more than an elaboration of this notion of *Unendlichkeit*. "The infinity of a series," he says, "consists in this, that it can never be completed by means of a successive synthesis." Or again, "The true transcendental concept of infinity is, that the successive synthesis of units in measuring a quantity can never be completed."⁸⁵ For Kant, then, the infinite is simply and literally the *endless*.

Another definition which is of considerable historical importance is that of Bolzano. Professor Keyser paraphrases it as follows:⁸⁶ "Suppose given a class *C* of elements. Out of these suppose a series is formed by taking for first term one of the elements, for second term two of them, and so on. Any term so obtained is itself a class of elements, and is *defined* as finite. Now either the process in question will exhaust *C* or it will not. If it will, *C* is itself demonstrably finite; if it will not, *C* is *defined* to be infinite." Bolzano is recognized as the initiator of the movement which led to the formulation of the much-heralded "New Infinite"; and Keyser tells us in the article from which the above excerpt has been taken that Bolzano's definition, although perhaps not so convenient in the actual practice of the mathematician, is in principle exactly equivalent to that of Dedekind. However this may be, it is clear that Bolzano's definition is exactly equivalent to that of Kant. The difference between the two is formal only. Kant employs the method of addition; Bolzano that of subtraction.

⁸⁵ *Kritik der Reinen Vernunft*, A, 426 and 432. (Mueller's translation, pp. 344, 348.)

⁸⁶ *Journal of Philosophy, etc.*, I, 33.

The former is thinking of the completion of a somewhat that exists only as a scheme or plan; the latter is thinking of the depletion of an already existing class of elements. Yet the fundamental thought is the same in both: that which is infinite is *endless*; and because it is endless, it is impossible either to construct anything so great as to equal it, or to take away from it anything so great as to exhaust it.

Let us now examine the "new" definition of infinity as it has been formulated by Dedekind. "A system *S* is said to be *infinite* when it is similar to a proper part of itself." As a first step in my argument that this infinite is only the old infinite in a new suit of clothes, I shall show that *whenever a series is found which is "similar to," that is to say, in one-to-one correspondence with, a proper part of itself, the series in question may be shown to be in several other kinds of correspondence with the same part; in fact, any sort of correspondence that one pleases to look for may be discovered; and, furthermore, any scheme or plan of correspondence may be shown to be just as rigidly determined by law as any other—and specifically, as the scheme of one-to-one correspondence, which the partizans of the "New Infinite" have too hastily assumed to be the relation in which the two series eternally stand.*

Consider as a typical case the series of even numbers, which, by definition, is a proper part of the series of whole numbers, and yet is required to stand in one-to-one correspondence with that series, by the law that each of its terms is a number *twice* the corresponding term of the series of whole numbers. This series illustrates the "similarity" of a system to a proper part of itself; and, therefore, by Dedekind's definition, is infinite. But we find that any other correspondence than the one-to-one may be seen, if we wish to see it. This may be exhibited thus:

I.	(W)	1,	2,	3,	4,	5,	6,	...
	(P)	2,	4,	6,	8,	10,	12,	...

II.	(W)	1,	2,	3,	4,	5,	...
	(P)	2, 4,	6, 8,	10, 12,	14, 16,	18, 20,	...
III.	(W)	1, 2,	3, 4,	5, 6,	7, 8,	...	
	(P)	2,	4,	6,	8,	...	
IV.	(W)	1, 2,	3, 4,	5, 6,	7, 8,	...	
	(P)	2, 4, 6,	8, 10, 12,	14, 16, 18,	20, 22, 24,	...	

Case I is the case which has been supposed to be *the* situation. In the other three cases we have respectively a one-to-two, a two-to-one, and a two-to-three correspondence. Now these other sorts of correspondence are determined by clear and definite rules, of exactly the same kind as, although a little more complicated than, the rule which determines the one-to-one correspondence. In Case II, let the rule be, that the second of the *two* terms paired with any *one* term of the whole series shall be *four* times that term; in Case III the second of the *two* terms of (W) is the same number as the *one* term of (P) with which the two terms of (W) are bound up; in IV every *two* terms of (W) are bound up with *three* of (P), and the rule determining the correspondence is, that the last term of any given group of (P) shall be *three* times the last term of the corresponding group of (W). Now it is necessary to insist that the (P) of I, of II, of III, and of IV is exactly the *same* series. The "proper part," 2, 4, 6, 8, 10, 12, 14, 16, ..., is the "proper part" that is considered in each case. It has been shown, then, that the whole series stands to this proper part in these *various* relations of correspondence *in exactly the same sense* in which it stands to it in the relation of *one-to-one* correspondence.

The proof that this is true of *any* proper part of the series of whole numbers that one may choose to consider, as for example, the series of multiples by 3, 4, etc., or of squares, cubes, etc., of the terms of the natural series of numbers, must be left to the ingenuity and patience of the reader.⁸⁷ He will

⁸⁷ In the typewritten copy of this dissertation, which may be found in the library of the Johns Hopkins University, I have considered these and other series in considerable detail, and have suggested formulae for several

find that the correspondence of a whole and a proper part of itself, which has been taken as the essential notion in the "new" definition of infinity, turns out, when more closely scrutinized, to be a nose of wax; it can be bent in any direction that one pleases.

How then shall we interpret Dedekind's definition, in the light of our examination of these examples of the relation of one-to-one correspondence of whole and part? "A system *S* is *infinite* if it is similar to a proper part of itself." Does this mean (1) That the whole and the proper part in question are in one-to-one correspondence, *and in no other*, or (2) that the whole is in one-to-one correspondence with a proper part of itself, but is *also* related to the *same* part in accordance with *other* schemes of correspondence?

If the former interpretation is correct, then, so far as I am aware, no genuine example of an infinite system has ever been adduced. At any rate, no example of an infinite system is revealed by an examination of the mutual relations of the various series of cardinal numbers. If this is the meaning of the definition, the class of all classes each of which is "similar" to a proper part of itself is a *class without any members*; for we have found that in every case where a one-to-one correspondence is discoverable, correspondences of other sorts are also discoverable.

On the other hand, if the latter is understood to be the meaning of the definition, if the whole and its proper part are in a relation of one-to-one correspondence, and *also* in relations of one-to-two correspondence, two-to-three correspondence, etc., then the definition is not *new*, but is logically identical with or at all events necessarily implies the old definition of the infinite as the *endless*; for any endless series is *inexhaustible*, and, between two inexhaustible collections, it is always possible to exhibit a one-to-one correspondence, or any sort of correspondence that one chooses to look for, inasmuch

types of proper parts, by the use of which an "*m-to-n* correspondence" (*m* and *n* being any whole numbers) may be determined between the series of whole numbers and any given proper part.

as, however far the pairing of terms or the correlation of groups may be carried, there can never be any dearth of partners or of groups of terms in either collection.

We should expect, then, that the logical absurdity found by Renouvier in the conception of a "realized infinite" would not be removed by so simple an expedient as the re-phrasing of the definition of infinity. The creators of the "New Infinite" have indeed "taken the bull by the horns,"⁸⁸ and have sought to escape the self-contradiction lurking in the notion of infinity by making this very self-contradiction the heart and center of their definition. But this does not remove the contradiction. Although it has been sugar-coated, it is still there; and it is an obvious, though not infrequently neglected, logical requirement that, to quote the words of Poincaré, "in defining an object we affirm that the definition does not imply a contradiction."⁸⁹

Now when Dedekind speaks of the endless series of cardinal numbers as a *system*, he tacitly imports the notion of finitude into his definition of infinity. For we naturally think of a system as a whole, a somewhat that is completely given. The self-contradiction appears even more clearly when we consider the phraseology of Cantor. His "infinite aggregate" is conceived as a "totality." Thus his first example of an infinite or transfinite aggregate is the "totality of finite cardinal numbers."⁹⁰ But as he himself speaks of "the unlimited series of cardinal numbers,"⁹¹ it is clear that he has fallen into a self-contradiction, or else that in his usage the term "totality" is not to be understood in the same sense as in the arguments of the neo-criticist school. For, if the series of numbers is *unlimited*, what right have we to speak of it as a *whole* or a *totality*? If the word "totality" is understood in the sense in which it is employed by Renouvier and Pilon, its use in a definition of the number "Aleph-zero" would constitute a

⁸⁸ James, *Problems of Philosophy*, p. 176.

⁸⁹ *Science et Méthode*, p. 162.

⁹⁰ *The Theory of Transfinite Numbers*, p. 103.

⁹¹ *Ibid.*, p. 99.

begging of the whole question which is at issue between the finitists and the infinitists. If, however, when Cantor speaks of a "totality," he means no more than that the collection or series which he denotes by the term is *determinate* (that is, is so defined that it is in principle possible to distinguish it from every other collection or series and always possible to tell whether or not it includes any given term or collection of terms), then such a "totality" may be infinite in the *old* sense, that is to say, it may be *endless*. For example, we can always tell whether or not a given number belongs to the series of even numbers or to the series of odd numbers; and, inasmuch as these series are thus logically distinguishable, there is a sense in which they are definite and thinkable unities; yet each of these series is endless, because, by the very law of its formation, however far it is continued, we must needs look for more and still more terms. Such determinate but endless series are, indeed, examples of Renouvier's "indefinite." But in Renouvier's terminology an "endless totality" would be a contradiction in terms. That is why a "realized infinite" is logically impossible. An infinite that was *realized*, a somewhat actually existing and not merely a scheme or plan in process of realization, would be a *totality* in the sense that no part of it would be wanting; and yet as *infinite* it would be endless or *unfinished*.

There may be, and no doubt are, many logically distinguishable types of endless series; and accordingly it is perfectly legitimate for the mathematician to study these various types, and even to call them transfinite *numbers* if he wishes to employ that terminology, and is not himself led astray by it. But unless we forget this ambiguity in the meaning of the term "totality," it is impossible to suppose that the definition of "transfinite number" has made any contribution whatever toward the solution of the logical difficulty found by the school of Renouvier in the conception of a "realized infinite."

3. *The New Infinite and Monistic Idealism.*—We must next inquire what bearing, if any, these recent discussions of

the definition of infinity have upon the doctrine of the monistic Absolute. Monistic idealism, I have said, implies the conception of infinity in both senses. In our second chapter we saw that God cannot be conceived without contradiction to be infinite in the first sense—he cannot be regarded as including all reality; and now it is in order to consider the dependence of monistic idealism upon the notion of infinity in the second sense—upon the mathematical or numerical infinite. There are two ways in which monistic idealism implies the notion of a realized infinite:

(a) The Absolute is said to be in possession of all time in an *Eternal Now*. "The real world of our Idealism has to be viewed by us men as a temporal order. For it is a world where purposes are fulfilled. . . ." But "this same temporal order is, when regarded in its wholeness, an Eternal Order. . . . The whole real content of this temporal order . . . is *at once* known, *i. e.*, is consciously experienced as a whole, by the Absolute."⁹²

This may perhaps mean that the temporal order is an "illusion of the partial view," that it belongs to the realm of mere appearance and not to that of genuine reality. We have already pointed out the difficulty of attaching any meaning to the proposition that time is illusory,⁹³ and need not repeat what has already been said. The sentences just quoted from Professor Royce are capable of another interpretation. When he says that the whole content of the temporal order is known *at once*, he himself explains the phrase *at once* as equivalent to *in the same present*. Now the present, he tells us, is sometimes understood to be the mathematical line which separates the future and the past, and as a mere boundary to be without extent. Again the *present* "is any one temporal event, in so far as it is contrasted with antecedent and subsequent events, and in so far as it excludes them from coexistence with itself in the same portion of any succession." In the third place,

⁹² Royce, *The World and the Individual*, II, 134 and 138.

⁹³ Chapter II, Section 2 (b).

the *present* "is any portion of real time with all its included events, in so far as there is any reason to view it as a whole, and as known in this wholeness by a single experience."⁹⁴ When Royce says, then, that the whole temporal order is known *at once*, his meaning *may be* no more than that the whole temporal order *is a whole*. All time is present to the Absolute as a *totum simul*.⁹⁵

Here, however, we meet the difficulty of the realized infinite, of the *totality of the unlimited*. Royce seeks to justify the conception of the *totum simul* by regarding it as analogous to the "specious present" of the individual mind. We perceive the words of a phrase or a brief clause like "The curfew tolls the knell of parting day," not merely as successive, but also all at once, as a whole. In the same way the Absolute, thinks Royce, knows all the events of all time at once or as a whole. Many questions might be asked about the analogy of the "specious present" and the "*totum simul*." But we can not ask them here. I merely wish to stress the point that the idealistic doctrine of an Eternal Now must stand or fall with the logical possibility or impossibility of the realized infinite. For *all time* includes the unlimited past and the unlimited future; and how can that which is unlimited be a whole?⁹⁶

(b) The argument for monistic idealism depends upon the assumption that a thing exists "just in so far as there is experience of its existence."⁹⁷ This principle is a special application of the more general principle of the "internality of relations." If a "thing" is constituted by the relations in which it stands, then the attempt to define anything must inevitably lead to an infinite regress; and the infinite regress is logically intolerable. This is the burden of Mr. F. H. Bradley's "*Appearance and Reality*." The attempt to define any of the ordinary categories of thought, as *substance*, *quality*,

⁹⁴ *The World and the Individual*, II, 140.

⁹⁵ *Ibid.*, p. 141.

⁹⁶ Compare Chapter V, Section 2.

⁹⁷ *The Conception of God*, p. 43.

relation, the *self*, etc., brings us to no final or satisfactory conclusion, but merely produces an endless series.

Critics of a realistic temper may cut the knot by denying the principle of the internality of relations. Royce, however, is committed to this principle, and therefore seeks to avoid the difficulty by maintaining that the "infinite regress" is not a fatal defect. It is fatal, he holds, only when you take it term by term, *i. e.*, successively; if you assume the infinite multitude or series of terms to be given *all at once* in one single purpose or plan, the infinity becomes harmless.

How then is it possible to take the "infinite regress" all at once? The problem, thinks Royce, is solved for us in Dedekind's definition of infinity. Thus the New Infinite becomes a main support of monistic philosophy. Idealism implies an infinite system, and the discovery of Dedekind permits us to think of the infinite not merely as endless but as an instance of *self-representation*. "Whatever considerations make for an idealistic interpretation of reality, become considerations which also tend to prove that the universe is an infinitely complex reality, or that a certain infinite system of facts is real. For idealism, in defining the Being of things as necessarily involving their existence for some form of knowledge, is committed to the thesis that whatever is, is *ipso facto* known (*e. g.*, to the Absolute). . . . Since, however, the fact world even for idealism contains many aspects (such as the aspects called feeling, will, worth, and the like) which are not identical with knowledge, although for an idealist they all exist as known aspects of the world, it follows that for an idealist the facts which constitute the existence of knowledge are themselves but a part and not the whole of the world of facts; yet, by hypothesis, this part, since it contains acts of knowledge corresponding to every real fact, is adequate to the whole, or in Dedekind's sense is equal to the whole. Hence the idealist's system of facts must, by Dedekind's definition, be infinite; or for the idealist the real world is a self-representative system, and is therefore infinite."⁹⁸

⁹⁸ *Ibid.*, 40.

Moreover, if we try "to conceive . . . the universe in realistic terms as a realm whose existence is supposed to be independent of the mere accident that anyone does or does not know or conceive it, . . . it is possible to show that this supposed universe has the character of a self-representative system," that is to say, is infinite. For, "if the supposition is itself a fact, then, at that instant, when the supposition is made, the world of Being contains at least two facts, namely, F and your supposition about F ." Call the supposition f . Then your universe is at least $F + f$. But, "this universe as thus symbolized, has not merely a twofold, but a threefold constitution. It consists of F and of f , and of their $+$, *i. e.*, of the relation as real as both of them, which we try to regard as non-essential to the being of either of them, but which for that very reason, has to be supposed wholly other than themselves, just as they are supposed to be different from each other."⁹⁹

"Hereupon, of course, Mr. Bradley's now familiar form of argument enters with its full rights . . . the $+$ is linked to f and to F and the 'endless fission' unquestionably 'breaks out.' The relation itself is seen entering into what seem new relations."¹⁰⁰

Thus Royce agrees with Bradley that every form of realistic being "involves such endless or self-representative constitution";¹⁰¹ that, in particular, realistic being breaks down upon the contradictions resulting from this constitution. Royce, however, does not accept the view "that to be self-representative is as such to be self-contradictory." This conclusion, he thinks, is obviated by the help of the definition of infinity as a self-representative system. The notion of "self-representation" permits us to take an infinite multiplicity all at once.

Royce illustrates his meaning in various ways. Some manufacturers have ingeniously used a picture of the package in which their product is contained as a trade-mark, and have

⁹⁹ *The World and the Individual*, p. 538 f.

¹⁰⁰ *Ibid.*, p. 540.

¹⁰¹ *Ibid.*, p. 542.

then placed this trade-mark as a label upon the package. But the package thus labeled with its own picture, inevitably requires the picture to contain for accuracy's sake . . . a picture of itself."¹⁰² Or suppose that somewhere upon the soil of England there is a map of England. Suppose, further, that this map is a perfect representation, indicating every detail of the surface of England. It is clear that this map must contain a map of itself.

The attempt actually to construct an accurate picture or a perfect map of the sort just described would indeed require an endless process and therefore be impossible of fulfilment; but, says Royce, the plan itself is given all at once. "Mathematically regarded the endless series of maps within maps, if made according to such a projection as we have indicated, would cluster about a limiting point, whose position would be exactly determined. Logically speaking their variety would be a mere expression of the single plan, 'Let us make within England and upon the surface thereof, a precise map, with all the details of the contour of its surface.' . . . The *one* plan of mapping in question necessarily implies just this infinite variety of internal constitution. . . . We are not obliged to deal solely with processes of construction as successive in order to define endless series."¹⁰² "To conceive the true nature of the infinite, we have not to think of its vastness, or even negatively of its endlessness; we have merely to think of its self-representative character."¹⁰³

Does this idea of "self-representation" escape the difficulty of the "endless regress"? The issue thus raised is in principle the same as that involved in the conception of the "totality" of an unlimited series; yet inasmuch as we have taken Professor Royce as the typical exponent of monistic idealism it seems proper to devote a few paragraphs to a discussion of the illustration which he himself employs. "A map of England, contained within England, is to represent

¹⁰² *The World and the Individual*, pp. 506 f.

¹⁰³ *Hibbert Journal*, I, 35.

down to the smallest detail every contour and marking, natural or artificial, that occurs upon the surface of England.”¹⁰⁴ The perfection of the map requires that there be a “one-to-one correspondence, *point for point*, of the surface mapped and the representation.” In other words, if *A* is the surface mapped and *A'* the representation, “for every elementary detail of *A*, namely, *a, b, c, d* (be these details conceived as points or merely as physically smallest parts; as relations amongst the parts of a *continuum*, or as relations amongst the units of a mere aggregate of particles), some corresponding detail, *a', b', c', d'*, could be identified in *A'*, in accordance with the system of projection used.”

Let us consider first the notion of *perfect* representation where the copy is assumed to be *smaller* than the original, and then that of perfect *self*-representation.

In the opinion of Royce, “that a smaller picture should be a perfect representation of a larger object is a perfectly definable ideal.”¹⁰⁵ But that, even as an ideal, it is not a self-contradictory conception is by no means clear. If only details that are visible to the naked eye are pictured, there is no difficulty; for a microscope may be used to read the map. But if the object to be pictured is itself viewed under the microscope, and all the details *thus* visible are to be represented, it is clear that if the map or picture were much smaller than the original, exact *legible* representation would be impossible. If now it be replied, as Royce would perhaps reply, that the quality of being *legible* is irrelevant to the notion of perfect mapping, that all that is meant by it is, that for every detail of the original there shall be a corresponding detail in the copy, then it is clear that, if both original and *copy* are assumed to be made up of a *finite* number of indivisible units, such perfect mapping is impossible, unless the copy be assumed to possess a *finer texture* than the original (*i. e.*, to contain a greater number of indivisible units to the square

¹⁰⁴ *World and Individual*, I, 503 ff.

¹⁰⁵ *Hibbert Journal*, I, 27.

inch). If, however, there is assumed to be no difference in texture, the points or ultimate units of which the material of the map or picture is composed must be *infinitely* numerous.

In other words, the perfect representation of any object on a smaller scale implies, either that the copy, although smaller, contains exactly as many ultimate units as the original, or else that the copy is a *continuum*, or at least a *compact* collection of points. If we assume the notion of the continuum, there is, then, no difficulty in the idea of a perfect representation of a larger by a smaller surface. Indeed, if we assume that space is *continuous* or *compact*, such representation is an everywhere-present fact; because, for every point in a solid or a surface, there must then be assumed to be a point in any other solid or surface, however small the latter may be.

It is clear, then, that the idea of an absolutely *perfect* representation, even without the added notion of *self*-representation, requires the conception of an infinite multiplicity of elements, unless we make the above-mentioned assumption concerning the finer texture of the material of the copy. It is indeed essential to Royce's argument that the map be drawn upon the soil of England, and therefore be an example of *self*-representation; but this is not essential to the idea of the map as an illustration of *infinity*. All that is required is the assumption that for every point in the surface of England there shall be a point on the map, *however small the map is drawn*. But as I have already remarked, this follows from the notion of the continuum. If two surfaces are both assumed to be continuous, then, however large the one may be and however small the other, for every point in the one there is a point (or, for that matter, and this destroys the notion of a *definite* representation, there are two, three, or as many as you please) in the other. Instead, then, of supposing a map within a map, and so on forever, we can just as well suppose the original map without the loss of any detail to become smaller and smaller without limit. On either assumption the perfect mapping, even of only the *visible* markings of England's surface,

would imply the notion of an infinite multitude of points in any designated portion of the surface upon which the map is drawn.

In the case of *self*-representation, or rather of representation by a *part* of that which is represented, it is obvious that the notion of infinite multitude must be assumed; for here we have representation on a smaller scale, and there is no difference in the texture of the original and the copy, or at least of part of the original and the copy. We find then that we have been traveling in a circle. In an effort to avoid the endless regress we have defined a conception of self-representation, only to find, when we examine our conception a little more closely, that it contains the very notion which it was designed to escape. If, then, the notion of an endless regress is self-contradictory, that of self-representation, or of a purpose that is infinitely rich in implications, is likewise self-contradictory.

We conclude, therefore, that the "discovery" of the so-called New Infinite leaves the problems of theology exactly as it found them; and that the apparent bearing of the new conception of infinity upon these problems is the result of a double use of such terms as "totality" and "equality."¹⁰⁶

¹⁰⁶ The reader may be interested in Royce's use of the New Infinite to explain the relation of the Absolute to the Particular Self (*Hibbert Journal*, I, 44) and in Keyser's attempt by its aid to defend the doctrine of the Trinity and that of the divine omniscience (*The New Infinite and the Old Theology*, pp. 85 ff.). It seems clear that both writers are merely playing on the word *equality*.

Professor Royce suggests that "a wholly new light" is thrown "upon the possible relations of equality which, in a perfected state, might exist between what we now call an Individual or a Created Self and God as the Absolute Self. Perhaps a being, who, in one sense, appeared infinitely less than God, or who at all events was but one of an infinite number of parts within the divine whole, might, nevertheless, justly count it not robbery to be equal to God, if only this partial being by virtue of an immortal life or of a perfected process of self-attainment, received in the universe somewhere an infinite expression." When we recall, however, that to be 'equal' here means no more than to be of the same "*Mächtigkeit*," i. e., to be in the relation of one-to-one correspondence, it is far from clear that the "infinite expression" of the partial being is of any *spiritual* or *ethical* significance.

Professor Keyser, who is by profession a mathematician, tells us that it is a great error to suppose that the whole-part axiom is universally valid. It ought rather to be considered as a "logical blade" which divides the finite from the infinite. Some of the difficulties of theology, Professor Keyser assures us, have been caused by assuming that this axiom applies to infinities.

Thus the doctrine of the Trinity has been pronounced absurd, because it implies that one infinite is composed of three infinities, and that each of the three is equal not only to each of the others but to the whole which they jointly constitute. But this objection, says Keyser, erroneously assumes that the whole-part axiom holds for infinities. He illustrates the logical possibility of the conception of a One which is also Three by means of the relation of the number-system to certain of its parts. Let M be the manifold of all rational numbers, E of the even numbers, O of the odd numbers, and F of the rational fractions; then it is evident that E , O , and F are proper parts of M ; and also that a one-to-one correspondence is discoverable between M and each of these parts taken separately. Therefore by Dedekind's definition, M , E , O , and F are all infinite manifolds. "What is important is now obvious," says Keyser. "It is that we have here *three* infinite manifolds, E , O , F , no two of which have so much as a single element in common, and yet the three together constitute one manifold M exactly equal in wealth of elements to *each* of its infinite components." The application to the theological Trinity is of course evident.

An obvious objection here presents itself. One might naturally inquire why there are just *three* rather than *two* or *four* persons. Indeed the mathematical analogy suggests an infinity, or at least a very large number, of constituent persons; and, as we have seen, Royce holds that the Absolute may be conceived without contradiction to include a multitude, and, in fact, an infinite multitude, of selves. This objection, however, misses Keyser's point, which is, not that the doctrine of the Trinity can be mathematically demonstrated, but merely that, if on some other ground we believe that the One is Three and the Three are One, the conception is not logically absurd.

It may be questioned, however, whether the aid thus so kindly proffered by *Mathesis* to Theology will be very enthusiastically received. On the one hand, Trinitarians like Cardinal Newman, who seems to have liked the doctrine all the more on account of its incomprehensibility (see Newman, *The Grammar of Assent*, pp. 124 ff.), may even be disposed to resent this attempt to make their cherished formula as plain and clear as the multiplication table or the rule of three; for, if the Trinity is not incomprehensible, half the merit of assenting to the ancient creeds will be lost. On the other hand, adherents of the "new theology" who still consider themselves Trinitarians have learned to *interpret* the ancient formulæ in such a way as to remove the contradiction; and therefore do not recognize the need of a demonstration of the conceivability of a numerical Trinity in Unity.

The "new" conception of infinity is also employed by Professor Keyser in defense of the doctrine of the divine omniscience. Objection has frequently been made to this doctrine on the ground that it seems to abolish human freedom and to make God responsible for human sin. Keyser suggests that we may preserve the *dignity* of omniscience while giving up omniscience in the strict sense of the term. Suppose the knowledge of all events to include an infinite number of knowledge-elements. Now suppose this infinite manifold to be divided by a plane which in our imaginative construction represents the present instant. Then it is evident that there is a one-to-one correspondence between the manifold of elements either before or behind this boundary and the undivided manifold. In other words, the knowledge of the past alone is just as infinite as the knowledge of the events of all time. Accordingly, even if God is assumed to have no knowledge of undetermined future events, His knowledge is nevertheless infinite; and, in the phraseology of the partizans of the New Infinite, God may still be said to possess the *dignity* or *Mächtigkeit* of omniscience. The same argument is easily made to fit the case of omnipotence or of omnipresence. In an infinite world the Deity might then be infinite in knowledge, power, etc., without being omniscient, omnipotent, or omnipresent. One may, however, be sufficiently "tough-minded" to inquire just what is the value of the word "infinite" and the phrases "dignity of omniscience," etc.? Certainly no one would hold that merely to be infinitely rich in numerical elements is a quality which is of any *ethical* value; for, if it were, then *any* portion of a continuum would possess this transcendent dignity.

VII.

CONCLUDING REFLECTIONS ON FINITIST THEOLOGY.

1. *A Recapitulation of the Argument for the Divine Finitude.*—We have been led to conclude that God is finite in both senses of the word—that he is not infinite either in the sense of including or possessing an infinite number of elements, or in the sense of including or controlling the whole of reality. Our position is therefore completely opposed to that of monistic idealism, according to which God or the Absolute is infinite in both these senses. It may be well to give a summary re-statement of the reasonings which have led us to this conclusion.

(a) As Royce himself has shown, his conception of the Absolute presupposes the notion of the realized infinite. But the conception of a *realized* infinite is a contradiction in terms; for that which is infinite or endless is not realized or complete. And the “new” conception of infinity does not escape the logical defect of the “old”; for, as we have seen, the attempt to get rid of the self-contradiction by including it in the definition is not satisfactory: the contradiction, though concealed from view, still remains.¹⁰⁷

(b) The Absolute is said to experience all in an “Eternal Now”; but the notion of an experience which is itself “timeless” while yet including experiences of temporal relation is self-contradictory.¹⁰⁸ Moreover the “Eternal Now” would be a realized infinite, and on that account, too, logically impossible.¹⁰⁹

(c) The Absolute is an all-containing mind and possesses

¹⁰⁷ Chapter VI.

¹⁰⁸ Chapter II, Section 2 (b).

¹⁰⁹ Chapter VI, Section 2.

an all-inclusive experience. Now there can be no all-inclusive experience; for it is psychologically impossible for certain of the experiences of the individual mind, especially such as are conditioned by limitation and isolation, to be identical parts of an all-inclusive mind. For such a mind, by virtue of the fact that it is all-inclusive, is unable to have these experiences. And yet if it does not have them, it is not all-inclusive.¹¹⁰

(d) The identification of God with the Absolute is vetoed by the *ethical* difficulty which besets every doctrine of the divine omnipotence. God is good; and, in a world such as ours, no good being can be omnipotent. Not only does this objection hold against the conception of the Absolute, but against that of a Mind that possesses a *knowledge about* all things without including everything as an identical part of its own experience; for, if a Being were omniscient even in this restricted sense, such a Being would be, if not in Royce's phrase "world possessing," yet certainly world-controlling, that is to say, *omnipotent*.¹¹¹

(e) The theory of monistic idealism is unsatisfactory as a *practical* philosophy, inasmuch as it logically implies a life of acquiescence rather than of action.¹¹²

(f) Considered as the equivalent of or as a substitute for the traditional idea of God, the Absolute is *religiously* inadequate. It lacks *worth*, and does not satisfy man's craving for fellowship with a *Person*.¹¹³

On the other hand, the theory of a Supreme Being who is limited in knowledge and power is *logically* unobjectionable, is not inconsistent with the presence of evil in the world as it now is, implies the genuineness of human coöperation with God in the contest with evil, and offers man an Object worthy of his worship, a Person who desires his love.

3. *The Difficulties of Finitist Theology.*—Let us not, however, assume too hastily that finitist theology is completely

¹¹⁰ Chapter II, Section 2 (b).

¹¹¹ Chapters III and IV.

¹¹² Chapter II, Section 2 (c).

¹¹³ Chapter II, Section 2 (a).

satisfactory as a religious doctrine. Several questions present themselves:

(a) *Is Finitist Theology a Monotheism or a Polytheism?*—

If God is the whole of existence, or even if he is assumed to be distinct from, or only a part of, the universe but yet omnipotent, there can be no doubt that there is but *one* God; for there can not be more than one whole of existence or more than one omnipotent. If, however, we maintain that God is only a part of being, and that his power is so limited that some parts or aspects of being are not subject to his control, the proposition that there is but one God is far from self-evident.

For most of us, indeed, the issue of polytheism *versus* monotheism does not present a "live option." It does not appear to have been a live issue even for William James. Charles Renouvier, however, declines to decide one way or the other, and, indeed, is very favorably disposed toward polytheism. "The doctrine of unity," he says, "submits all the beings of the world to a royal authority which varies from the most absolute autocracy to a government tempered by a measure of liberty conceded to the subjects."¹¹⁴ On the other hand, the doctrine of a plurality of divine beings appears to Renouvier more accordant with republicanism. "Polytheism is the plurality of powers in the unity of direction." The same considerations which make for a belief in immortality lead Renouvier to look with favor upon the conception of a plurality of Gods. He thinks it improbable that all personal beings but one should be such as to be included in the class of men; and, like the ancients, supposes that men may be raised to the rank of Gods.¹¹⁵

One of his interpreters remarks that, though one may at first be surprised and possibly shocked by Renouvier's evident liking for polytheism, the saint-worship of the Roman Catholic Church would readily suggest such a doctrine. Furthermore, "the theology of the Councils of Nicæa, of Constanti-

¹¹⁴ Renouvier, *Psychologie rationelle*, Vol. III, p. 259.

¹¹⁵ *Ibid.*, pp. 255 f.

nople, of Chalcedon, affirm, and modern theologians still accept, the multiplicity of divine persons. The Christian Trinity is not a doctrine of the divine unity."¹¹⁶

It is true that Renouvier suggests that "this polytheism is far from being irreconcilable with the unity of God; . . . for the one God would then be the first of the superhuman persons, *rex hominum et deorum*."¹¹⁷ It is, however, perfectly conceivable that there should be a number of superhuman persons all finite in power, and that none of them should be "king." Indeed, to anticipate the theoretical doubt which is discussed in the next section, if all the members of such a pantheon, whether it were monarchical or democratic in its organization, could be known to be *good*, it is not evident that the polytheistic conception would be religiously unsatisfying. However, as remarked above, the issue does not present a "live option," and it will be better to assume, in the further discussion, that there is but one God.

(b) *Is the Supreme Being Good?*—It is true that the logical motive for the doctrine that God is finite is the desire to save his goodness. Our argument has been, God is good; the world is, in part, evil; therefore God's power is limited. His finitude is thus an inference from his perfect goodness; but it is evident that the argument cannot be reversed. The perfect goodness cannot be inferred from the finitude of the Deity.

If we divest ourselves of our prejudices, and forget the affinity of the words *good* and *God*, it is possible to conceive the existence of a being who is immeasurably more powerful than all others, and yet is not good. Such a Supreme Being might be defined as Power plus Intelligence plus Conscious Purpose. But the purpose toward which the power is directed need not include any concern for the pains and pleasures or the ideal values of humankind. As a man intent upon the accomplishment of some end goes his way, and does not even notice the ant-hill which his hurrying foot has demolished, so

¹¹⁶ Arnal, *Philosophie Religieuse de Charles Renouvier*, pp. 148 f.

¹¹⁷ *Psychologie rationnelle*, III, 255.

the Supreme Purpose might seek its own fulfilment wholly regardless of the hopes and wishes of the denizens of our planet. A consciously purposive Power wholly uninterested in the affairs of men is, accordingly, a *logically* possible conception of God.

Even the addition to this conception of that notion of an interest in human doings and sufferings which, I have said, is not necessarily included in the universal purpose, does not bring us at once to the Christian thought of a Father-God. It may indeed fall far short of it. The interest of the Supreme Power in human affairs might be entirely non-moral. It might be an interest in mundane happenings as a spectacle. Such a God might take pleasure in the happiness of his creatures, and *also* in their pains and disappointments, in their sorrows as well as in their joys. In short God as thus defined might be a Supreme Setebos, like him of whom Caliban muses in Browning's verse:

Thinketh such shows nor right nor wrong in Him
Nor kind, nor cruel: He is strong and Lord.
'Am strong myself compared to yonder crabs
That march now from the mountain to the sea;
'Let twenty pass, and stone the twenty-first,
Loving not, hating not, just choosing so.

If, now, we add to our conception of a Supreme Being the notion of moral quality, there still remains a horrible and repulsive possibility; for moral quality may be bad as well as good. The Supreme Power might be malevolent.

A reversal of the traditional theodicy is not inconceivable. Indeed the very argument by which men have sought to prove that this is the best might be employed with a few alterations to prove that it is the worst possible world. The elements of goodness which mar the perfection of absolute evil might be said to be required to set off the evil by contrast; or the Supreme Fiend might be supposed to be limited in his management of the universe by a sort of "iron law of wages": a certain amount of pleasure might be necessary to insure the continuance of the pain-economy.

To be sure, no one takes such a possibility very seriously; yet, from the standpoint of mere logic and cold facts, it is not unthinkable. The goodness of God cannot be proved. It can only be believed; that is, assumed as a working principle of human life. And, unless this assumption is made, the doctrine of a finite God has no religious value.

(c) *Does the God of Finitist Theology Exist?*—In a discussion of the adequacy of the idea of God the existential question can not be wholly ignored. It is true that the value of the idea is not wholly dependent upon its objective reality;¹¹⁸ yet, if a man were convinced that the idea of God is *merely* an ideal, then for him its value would be seriously impaired. If the existence of God is to be proved, the demonstration will have to consist in an exhibition of the evidences of his presence in the world. But no one will maintain that the argument from design establishes more than the *probability* of God's existence. Moreover, if, without evidence of his presence, we could become convinced of his existence, mere existence would not be enough. An entity that *does* nothing (although the thought of such an entity might avail to relieve one's loneliness) would not be completely adequate. From this point of view the question of the existence of God merges in that of his power.

We have criticized monistic idealism on the ground that, by reason of its doctrine of the eternal perfection of the Whole, it tends to quietism, to the mood of the "moral holiday." But there is danger of reaching a similar position from the opposite direction. The finite God may be so limited in our thought of him as to make it doubtful whether he can in any significant sense be said to be *supreme*. Thus the same modification that makes the traditional doctrine of God theoretically tolerable threatens to destroy its practical value. For if men should be convinced that, while there is a God, his power and intelligence are not adequate to the task of world redemption, they would fall into despair; and nothing

¹¹⁸ Mill, *Autobiography*; Vaihinger, *Die Philosophie des als Ob.*

so completely paralyzes action as despair. There is inspiration for strong natures in the thought of coöperation with a God who actually needs our help; but not all are strong, and even the strongest and most daring spirits have their hours of depression, when they need to feel that there is sufficient power on their side to assure the ultimate victory of the Right. From this point of view the question of God's existence is equivalent to a question about the salvability of the world. It may, accordingly, be rephrased thus: *Is there, in this world of ours, sufficient power and intelligence in the service of good will, to assure the realization and preservation of the values that we hold dear?*

4. *Finitist Theology and the Right to Believe.*—By William James finitist theology is combined with a doctrine of the "will to believe." The existence of God can not be proved by scientific methods of demonstration. Considered as a hypothesis it is, indeed, not inconsistent with the facts; but neither is the contrary hypothesis. Now, says James, this is a case where we ought to practise the will to believe. "Our passional nature not only lawfully may, but must, decide an option between propositions, whenever it is a genuine option that cannot by its nature be decided on intellectual grounds."¹¹⁹ In other words, though James nowhere puts it in just this way, we are at liberty to act *as if* we were certain of God's existence, even if we have no intellectual grounds, or have only insufficient grounds, for certainty.

There are, however, obvious objections to this procedure. It seems to encourage the all too common tendency to superficial thinking, where one's own interests and prejudices are involved; and there appears to be a suggestion of intellectual dishonesty in the proposal to *believe* when there is not sufficient evidence to convince the reason. In my opinion, however, these objections are based upon a failure to distinguish between different senses of the word "believe." It must be ad-

¹¹⁹ *The Will to Believe*, p. 27.

mitted, I fear, that James himself is partly responsible for these confusions.

There are at least three kinds of "believing." In the first place, one may be said to believe when he feels that he knows. Secondly, belief may be understood in a wholly practical sense. One shows his faith by his works; and it is easy to pass from this principle to the view that faith, or belief, is the action which would normally accompany or result from belief in the first sense. It is this second sense of believing, the acting as if one knew, which James seems to have chiefly in mind when he speaks of a "will to believe."

There is, however, a third sense of the word "believe," which seems to be implied, though not clearly distinguished from the others, in James's exposition. It differs from our first sense in being without real or supposed theoretical justification; and from the second in being an affair of feeling, rather than of will or action. If the first kind of believing is the "*feeling that one knows*," and the second, "*the acting as if one knew*," the third may be said to be "*the feeling as if one knew*."

That this third kind of belief is psychologically possible is a matter of everyday experience. Our feelings are seldom quite appropriate to the theoretical situation. The passenger on the railway train who is nervous and ill at ease because of the fear of a wreck is permitting emotion to outrun the evidence. But the same is true of the passenger who has no feeling of anxiety whatever; for there is *some* danger. And, while the probability of a wreck is not sufficiently great to justify the fears of the one, it is not so small as to justify the utter calm of the other. Belief, in the third sense, the *feeling as one would feel if one had theoretical knowledge which he does not have*, is thus illustrated by our usual freedom from emotional disturbance on a rapidly moving train. We know that a thousand and one things might happen, any one of which might plunge us to almost instant death; we may be theoretically persuaded that there are a given number of

chances in ten million that we will on this particular day be killed in a wreck; we may even allow our minds to dwell upon these chances of destruction; and yet feel as we should feel if the chance were absolutely nil.

This sort of belief is even better illustrated in our social relations. Here, too, the degree of certainty which we feel is not usually the exact degree that would be logically appropriate to the situation. We cannot *prove* that the bank will not fail; that people are telling us the truth; that our best friends will not play us false; that the Causes to which we devote ourselves are really worthy of our devotion. We can have no *intellectual* certainty in regard to these matters; and yet we not only *act* but also *feel* as we should act and feel if we *were* intellectually certain. In a word, our faiths and loyalties habitually outrun the evidence.

In the same way, although we do not *know* that there is a God, or that the world is moving toward a worthy goal, and cannot therefore be said to believe in the existence of God or in the salvability of the world in the first of our three senses of the word "believe," we have the right to believe in the other two senses. We are justified in accepting the existence of God as an assumption in accordance with which to plan our lives; and also in feeling a greater degree of certainty with reference to his existence than is theoretically warranted.

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